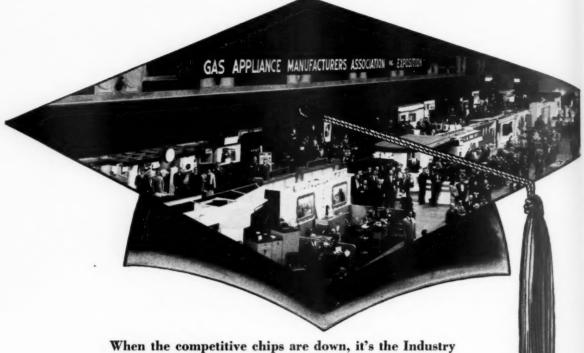
AMERICAN GAS ASSOCIATION

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AUGUST 1950

an Industry is as smart as its personnel!



When the competitive chips are down, it's the Industry with the smartest personnel that holds the winning hand. The smartest personnel is the best informed personnel.

Make sure your personnel is fully informed on the newest techniques and developments, newest methods and appliances, newest processes and equipment.



A.G.A. Convention and Exhibit

Atlantic City

THE GAS INDUSTRY'S MID-CENTURY PAGEANT OF PROGRESS

Here under one roof will be assembled a display of the finest appliances, machinery and methods. Here the keenest minds will discuss outstanding problems confronting you in the face of the Industry's greatest expansion program. Here is the Gas Industry in all its might and glory—a source of inspiration, an education for all.

GAS APPLIANCE MANUFACTURERS ASSOCIATION, INC.



The cover: Inspecting two million cubic foot gas holder at Troy, N. Y. Photo from Robert S. Halligan, Niagara Mohawk Power Corp.

HE sands of time are running fast! . . . Five short years after World War II, the American gas industry has set a new construction record. . . . Now the gas house heating boom is in full swing. Appliance testing experts at the A. G. A. Laboratories report that an increasing number of oil burner manufacturers are entering the lucrative gas house heating field. Unit shipments of gas-fired central heating equipment established a new record during the first five months of 1950. In addition, a new national magazine has joined the fielddedicated to the promotion and advancement of gas heating. . . . Already halfway through its 1950 promotional calendar, the gas industry is marshaling its forces for the second Old Stove Round Up this fall. The goal has been raised, the drive broadened, to include more companies and more local outlets than before. . . . Modern business could paraphase the old saying to read-"Time and Competition Wait for No One." Recognizing the pressure of competition, speakers at the New York-New Jersey Sales Conference last month produced pointers for immediate action to build public good will and protect the industry's major markets. . . . Whatever the future, a dynamic gas industry is ready to help keep America strong!

JAMES M. BEALL
MANAGER, PUBLICATIONS
JAC A. CUSHMAN
EDITOR
RICHARD F. MULLIGAN
ART SUPERVISOR

EDITORIAL OFFICES: AMERICAN GAS ASSOCIATION 420 LEXINGTON AVE., NEW YORK 17, N.Y.

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NEW A.G.A. MEMBERS .

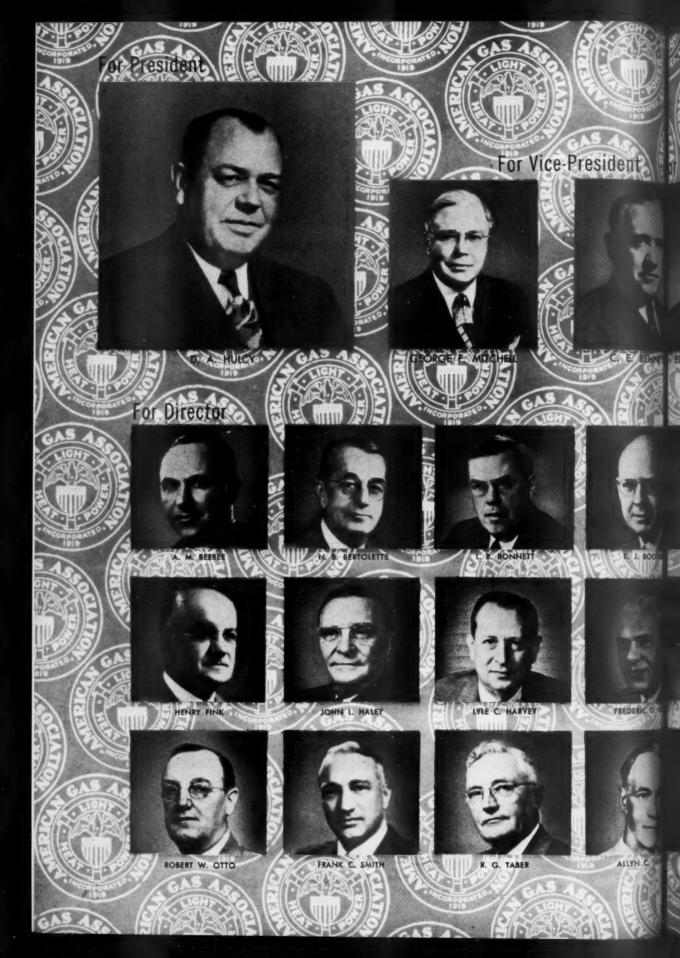
CONVENTION CALENDAR

PERSONNEL SERVICE

VOL. 32

NOS. 7 AND 8

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A.G.A. nominates for 1950-1951

Thirty-two of the gas industry's most prominent executives have been nominated for top positions in American Gas Association for the 1950-51 term. Nominations for Association officers, directors and Section officers will be placed before the membership for election at the 1950 A. G. A. Convention in Atlantic City, N. J., October 2-6.

In accordance with provisions of the Association's by-laws, announcement is hereby made of the report of the A. G. A. General Nominating Committee which was elected at the 1949 A. G. A. Convention in Chicago last October. Any 50 company members can place additional nominations in the hands of the Association's managing director by August 3, 1950.

R. H. Hargrove, president & general manager, Texas Eastern Transmission Corp., Shreveport, La., is chairman of the General Nominating Committee. Serving with Mr. Hargrove are the following committee members: C. P. Crane, president, Consolidated Gas Electric Light & Power Co. of Baltimore, Baltimore, Md.; N. Henry Gellert, president, Seattle Gas Co., Seattle, Wash.; Alexander Macomber, director, Portland Gas Light Co., Boston, Mass.; F. T. Parks, vice-president, Public Service Co. of Colorado, Denver, Colo., and Louis Ruthenburg, chairman of board, Servel, Inc., Evansville, Indiana.

Four industry officials have been nominated to serve as A. G. A. officers for a one-year term; 15 officials have been nominated to serve as A. G. A. directors for a two-year term; five others have been nominated to serve a one-year term as Section chairmen and two to serve a similar term as general committee chairmen. The Sectional nominees, if elected at the October Convention, automatically will become Sectional vice-presidents. Five other gas officials have been nominated as vice-chairmen of Sections and general committees.



The following nominations to brought to the attention of the A. G. A membership:

For president—D. A. HULCY, president Lone Star Gas Co., Dallas, Texas

For first vice-president—George | MITCHELL, president, The People Gas Light & Coke Co., Chicago

For second vice-president—C. E. Bes. NETT, president, The Manufacture ers Light & Heat Co., Pittsburgh

For treasurer—EDWARD F. BARRETT, president, Long Island Lighting Co. Mineola, N. Y.

For director—two-year term expiring 0c tober 1952

A. M. BEEBEE,* president, Rochester Gas & Electric Corp., Rochester, N. Y.

N. B. BERTOLETTE,* president, The Hartford Gas Co., Hartford, Conn.

L. B. BONNETT,* vice-president, Consolidated Edison Co. of New York, Inc. New York, N. Y.

E. J. BOOTHBY, president, Washington Gas Light Co., Washington, D. C.

A. W. CONOVER, president, Equitable Gas Co., Pittsburgh, Pa.

HENRY FINK,* president, Michigan Consolidated Gas Co., Detroit, Mich.

JOHN L. HALEY,* vice-president, Nagara Mohawk Power Corp., Syracus, N. Y.

LYLE C. HARVEY, president & general manager, Affiliated Gas Equipment, Inc. Cleveland, Ohio

Frederic O. Hess, president, Sela Corp. of America, Philadelphia, Pa.

ROBERT A. HORNBY, vice-president Pacific Lighting Corp., San Francisco

ROBERT W. OTTO,* president, Ladelt Gas Co., St. Louis, Mo.

FRANK C. SMITH,* president, Houston Natural Gas Corp., Houston, Texas

R. G. TABER, president, Atlanta Gas Light Co., Atlanta, Ga.

ALLYN C. TAYLOR,* president, Consumers Gas Co., Reading, Pa.

CHARLES G. YOUNG,* vice president. Springfield Gas Light Co., Springfield. Mass.

Accounting Section

For chairman

ALAN A. CULLMAN, assistant treaturer, Columbia Engineering Corp., New York, N. Y. (Continued on page 58)

*Renominated

AMERICAN GAS ASSOCIATION MONTHLY

Convention plans in high gear

Giant appliance exposition to be the largest and most impressive ever staged

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page 58

MONTHLY

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Numerous speakers of national renown will address the general sessions and Sectional meetings at the 1950 American Gas Association Convention in Atlantic City, N. J., October 2-6. Invited guest speakers who have made tentative acceptances include men prominent in the fields of industry, legislation and education, according to George E. Whitwell, vice-president, Philadelphia Electric Co., chairman, A. G. A. General Convention Committee.

Opening event on the Convention program will be a joint meeting on Monday, October 2, of the A. G. A. Manufactured Gas and Natural Gas Departments. A special discussion panel at this session will be devoted to the important subject of changeover from manufactured or mixed gas to natural gas. General sessions will be held in the Ballroom of the Atlantic City Auditorium on Monday afternoon, October 2; Tuesday morning, October 3, and Thursday morning, October 5.

The Gas Appliance Manufacturers Exposition will be the largest and costliest ever staged in conjunction with an A. G. A. Convention. Harold Massey, manager of the GAMA exposition, reported recently that every available booth had been sold. It was necessary to open up additional exhibition space to accommodate late applicants. Manufacturers are planning more impressive exhibits than ever before.

Plans are progressing for the giant dealer meeting which will be held on Thursday afternoon, October 5. This meeting is being sponsored by A G A, G.A.M.A., and National Appliance and Radio Dealers Association. No meetings have been scheduled for Wednesday afternoon to allow for visits to the Exhibition. It is expected that many of the dealers will arrive at Atlantic City in time to visit the exhibit on Wednesday. Thursday and Friday are designated as "Dealers' Days" and the exhibits will be open later than usual to permit visits by dealers.

The Industrial and Commercial Gas Section's program will open with a luncheon at noon on Tuesday, October 3, in the Rose Room of the Hotel Traymore. A managing executive of a natural gas company will speak on "The Factors Affecting the Location of Industry" with particular attention to fuel, especially natural gas.

The Section's annual meeting will follow the luncheon. Frederick O. Hess, president, Selas Corp. of America and president, Gas Appliance Manufacturers Association, will talk on "Equipment Performance and Fuel Cost in Our Economy." John J. Bourke, director of A. G. A. Commercial Cooking, will report on the industry's efforts to combat electric competition. The meeting will close with the report of the Nominating Committee and election of officers.

A joint sales conference of the Industrial and Commercial Gas Section and the Residential Gas Section will be held on Wednesday morning, in the Ballroom of the Auditorium. The industrial feature will be the presentation of a new film "Natural For Industry" made by Texas Gas Transmission Co., with a talk by Franklin T. Rainey, vice-president, East Tennessee Natural Gas Co., Knoxville, Tenn. The commercial gas feature will be a presentation "Mr. Flameless and Mrs. Flame," by Fred A. Kaiser, vice-president, Detroit-Michigan Stove Co., with an introduction by Leon Ourusoff, manager of utilization, Washington Gas Light Co., Washington, D. C. This is a presentation designed for meetings of

ISSUE OF JULY-AUGUST, 1950

5



Program Committee of A. G. A. Operating Section working on Convention plans in Cleveland on June 27: (Seated, L. to R.) J. M. McCaleb, F. J. Hall, E. G. Campbell, chairman, Managing Committee; R. Van Vliet, vice-chairman, Managing Committee; J. P. Stephens; (standing) J. S. Setchell, A. E. Sands, G. V. McGurl, S. E. Trouard, G. R. King, and A. G. King. Participating but not in picture was J. L. Coyne

restaurant operators.

Opening meeting of the Residential Gas Section in the Auditorium Ballroom will be held at 2 P.M. on Tuesday, October 3, under the chairmanship of H. P. Morehouse, Public Service Electric & Gas Co., Newark, N. J., chairman of the Residential Gas Section. Frank C. Smith, president, Houston Natural Gas Corp., and chairman, A. G. A. General Promotion Planning Committee, will offer "Formula For Sales," a complete presentation of the Association's sales, advertising and promotional programs. H. Vinton Potter and Clifford Hall, A. G. A. Promotion Bureau, will dramatize the Association's 1951 programs.

Winners of the Gas Refrigeration Awards will be presented with their prizes. Following the presentation of awards a round-table forum on automatic gas laundry dryers will be held with C. H. Rippe, Hamilton Manufacturing Co., W. M. Jacobs, vice-president, Southern California Gas Co., and Irene Muntz, chairman, A. G. A. Home Service Committee, participating and acting as discussion leaders.

Fen K. Doscher, vice-president, Lily-Tulip Cup Corp., will close the session with a dynamic presentation on proven techniques in sales training which help to improve volume of sales, morale and profits. Headquarters of both the Residential and the Industrial and Commercial Gas Sections will be at the Ritz Carlton.

The Home Service Department will hold its customary Home Service Breakfast on Wednesday morning, 8.00 o'clock at the Hotel Traymore. For many years this has been one of the most popular and best attended events of the Convention. The Home Service Committee states this year will surpass previous records in interest and hospitality. Immediately

following the breakfast the Home Service Round-Table will convene in the same hotel

The Accounting Section will be represented at the general session on Monday, October 2, by James K. Polk, New York tax authority, who will speak on "Social Security Unlimited." A general luncheon will be staged on Tuesday in the Rutland Room, Chalfonte-Haddon Hall Hotel. Speakers at the luncheon will include Eskil I. Bjork, vice-president, The Peoples Gas Light & Coke Co., Chicago, on employee relations, and H. Frank Carey, Long Island Lighting Co., who will discuss new theories in plant accounting.

Accounting symposiums

Beginning at 9.30 A.M. on Wednesday at the Auditorium, two separate but concurrent meetings will be held under the auspices of the A. G. A. Accounting Section. Under the Customer Activities Group, the section's customer accounting, customer collections and customer relations committees will hold symposiums on different aspects of customer activities. At the same time the General Activities Group will sponsor group meetings on materials and supplies, taxation accounting, and general accounting, with Sectional committees covering these subjects directing each of the meetings.

The Operating Section has arranged for a talk "How to Be Human on the Job" at one of the general sessions. Wallace G. Strathern, director of training, Eastern Gas and Fuel Associates, Boston, will be the speaker.

Features of the Tuesday afternoon Operating session will include a talk on driver training by Dr. Amos E. Neyhart, Pennsylvania State College. A. B. Lauderbaugh, The Manufacturers Light & Heat Co., Pittsburgh, will discuss basic principles of corrosion. The session will also include a report of the chairmen of the Motor Vehicles and Corrosion Committees, J. L. Coyne and G. R. King

Wednesday morning Operating events will include reports by Sidney E. Trouard chairman, Corrosion Committee, and F. J. Hall, chairman, Distribution Com. mittee. At the same session, Baxter Wil. son, Mississippi Power & Light Co., will discuss management's attitude toward corrosion control program. E. C. Bren. ner, Milwaukee Gas Light Co., will speak on the use of various gases for supplementing natural gas in Milway. kee. Another speaker, W. R. Fraser. Michigan Consolidated Gas Co., will discuss conversion of a low pressure distribution system for pound-pressure 211. Effect on work on consumer premises of conversions to natural gas will be outlined by R. H. Bussard, Washington Gas Light Co., Washington, D. C.

On Thursday afternoon, the Operating men will hear the report of the Noninating Committee and elect new officer for the Section.

Major program events at the Thursday meeting will include reports of the Chemical Committee by the chairman G. V. McGurl, and of the Gas Production Committee by its chairman, J. P. Stephens. W. Reed Morris, Koppers Co. Inc., will speak on the future outlook for the coke oven industry. An address by Louis Shnidman, Rochester Gas & Electric Corp., will show the effect of the components of fuel gases on flame characteristics. Two papers on the important subject of plant waste disposal will be delivered by W. H. Hart, Atlantic Refining Co., and Dr. W. W. Hodge, Mellon Institute of Industrial Research

The Entertainment Committee is arranging a comprehensive program that will open with the President's Reception and Dance in the Auditorium Ballroom beginning at 9 o'clock on Monday evening. Stage shows, concert music and other features are included in the program. The Ladies' Card Party and Tes will be held Tuesday afternoon.

Management

• The emergence of a new management era is the transferring of employers from technology to humanics. It is the appliotion of the same time, skill, effort, logic understanding and competency to human resources which management applied no successfully in the past to physical securious sources—Samuel A. Apley.

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Construction reaches new peak

Approximately \$3,140,000,000 will be spent by the gas utility industry on new and expanded facilities during the five-year period, 1950-54, according to a survey completed by the Association's Bureau of Statistics. Some \$2.75 billion of the \$3.14 billion total will be spent, it is estimated, by the natural gas industry and \$388 million by other branches of the industry.

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NTHLY

Construction and modernization activity in the gas utility industry continued its upward surge in 1949, exceeding the previous record established in 1948. Furthermore, anticipated construction expenditures for 1950 indicate that another record will be set this year.

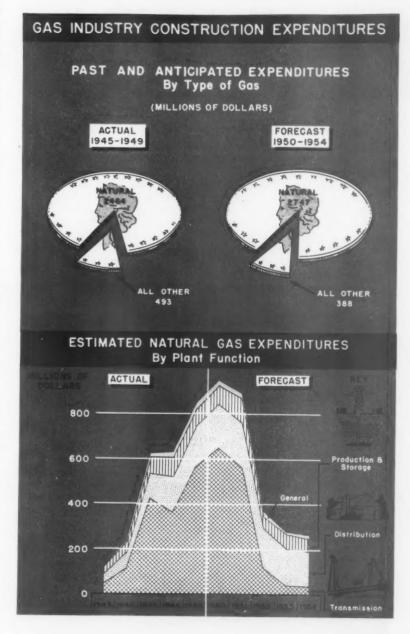
Gross construction expenditures of \$6.1 billion either have been made or are planned for the ten-year period, 1945-54. Due allowance should be made, of course, for inflated postwar costs and the fact that outlays for replacement and modernization are included in this total. Nevertheless, the enormity of the industry's program is indicated by the fact that the \$6.1 billion ten-year construction estimate actually exceeds the value of total gas utility plant (approximately \$5 billion) at the beginning of 1945.

These facts clearly establish the gas industry as one of the few major American industries which have maintained and recently have even increased the size of their construction efforts.

The final total of \$959.2 million which the gas industry spent in 1949 is a dramatic climax to its first five years of postwar construction during which \$2.96 billion* were expended for new facilities. Furthermore, it appears that the second five-year period, 1950-54, will witness additional construction expenditures equal to and possibly larger than those during the preceding five-year period.

(See page 8)

^{*}Including \$145 million for the purchase of the Big Inch and Little Big Inch pipelines for convenion to transmission of gas.



Present indications are that a maximum rate of expenditures will occur during 1950, probably exceeding one billion dollars for the first time in the industry's history. Construction activity is expected to diminish only slightly in 1951 with more marked declines for the last three years. However, projections for the succeeding years are more difficult to estimate at this early date and actual totals probably will be higher than anticipated.

These are the general highlights of a recent review conducted by A. G. A. to ascertain the gas industry's plans for plant expansion. They bring up to date and extend a previous A. G. A. study which covered the period 1948-52 (see A. G. A. MONTHLY, September 1949, p. 7).

Specifically, new transmission lines account for \$1,41 billion or \$1 percent of all anticipated natural gas expenditures. All but \$200 million of these anticipated sums are allocated for the first two years of this period (1950-54).

Anticipated expenditures for the next five years are based on a recent A. G. A. survey of large gas companies which account for the bulk of the industry's anticipated construction. To these estimates were added amounts for certain certificate approvals granted by Federal Power Commission prior to June 20, 1950, and for some pending pipeline projects not

yet approved by FPC for which the prospects were favorable, for which no allowance had been made in the basic expansion process.

Previous forecasts of transmission expenditures included only approved projects and proved to be unduly conservative for the later years. The current forecast may err in the same direction. One reason is that some companies undoubtedly have hesitated to release their tentative plans for additional construction during the latter part of the five-year period, at least until pending applications have been approved.

Construction plans for gas production and distribution are not affected by these uncertainties. The prospect of an ever-increasing number of customers is reflected by the fact that anticipated production and distribution expenditures have been revised upward from carlier estimates. Moreover, they are expected to stay at high levels throughout the five-year period.

The A. G. A. survey indicates that \$1.11 billion will be spent for new distribution plant. About 80 percent of this total will be by natural gas companies and the remaining 20 percent by manufactured, mixed and LP-gas utilities. Approximately \$426 million is expected to be spent for production and storage fa-

cilities. Included in this last category a provisions for development of new u derground natural gas reservoirs.

Past expenditures since 1945 are das fied by type of gas regularly distribut or handled by individual utilities in ea year. No segregation has been made between manufactured, mixed and LP-g. This is due to the fact that a number local utilities which expect to recentural gas are uncertain whether the will convert to mixed gas or use natural gas merely for enriching and reforming

Data for each year from 1945 throu 1950 are expansions for each branch the industry of information furnished the A. G. A. Bureau of Statistics in questionnaire "Annual Report of Operations." Existing companies who were surveyed represent approximat 90 percent of total gas industry revent Adjustments were made to include a struction expenditures in each year newly organized companies which I received FPC certificate approvals.

This article has been prepared for MONTHLY from a feature presentation the 1949 edition of A. G. A. "Geacts." Copies of the new edition will distributed to the industry after publicion in August. Extra copies will be avable at that time from American Gassociation—price one dollar each.

GAS UTILITY AND PIPELINE CONSTRUCTION EXPENDITURES • 1949-1954

	Actual		Forecast					Total Actual
	1949	1950	1951	1952	1953	1954	Forecast 1950-1954	1945-194
Production and Storage* Transmission Distribution General	\$ 69.1 567.7 182.0 29.3	\$ 87.3 645.6 193.5 27.9	\$101.0 564.7 199.6 25.5	\$ 53.9 119.8 174.4 17.0	\$ 60.2 41.3 163.6 11.8	\$ 52.0 37.7 158.5 11.5	\$ 354.4 1409.1 889.6 93.7	\$ 298. 1518. 557. 89.
	848.1	954.3	890.8	365.1	276.9	259.7	2746.8	2463.
Production and Storage Transmission Distribution General	42.5 5.8 57.7 5.1	37.2 5.2 64.2 5.5	19.4 21.3 45.8 3.9	12.8 6.4 39.9 3.9	9.5 6.4 36.1 3.7	21.8 6.4 35.2 3.8	100.7 45.7 221.2 20.8	212. 18. 241. 20.
	111.1	112.1	90.4	63.0	55.7	67.2	388.4	492
Production and Storage Transmission Distribution General	111.6 573.5 239.7 34.4	124.5 650.8 257.7 33.4	120.4 586.0 245.4 29.4	66.7 126.2 214.3 20.9	69.7 47.7 199.7 15.5	73.8 44.1 193.7 15.3	455.1 1454.8 1110.8 114.5	510. 1537. 798. 109.
	959.2	1066.4	981.2	428.1	332.6	326.9	3135.2	2956

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This article has been prepared for the MONTHLY from a feature presentation in the 1949 edition of A. G. A. "Gas Facts." Copies of the new edition will be distributed to the industry after publication in August. Extra copies will be available at that time from American Gas Association—price one dollar each.

	Actual	Forecast					Total Forecast	Total Actua	
	1949	1950	§ 1951	1962	1953	1954	1950-1954	1945-19	
Natural Gas									
Froduction and Storage						\$ 52.0	\$ 354.4	\$ 296.	
Transmission						37.7	1409.1		
Distribution						158.5	889.6		
_ General			25.5 N			145		89	
Total							2746.8	2463	
All Other Types of Gas									
Transmission						6.4	45.7		
Distribution			45.8		36.1	35.2	221.2	241	
General American		S. S. E.	3.9		3.7	3.5	20.8	20.	
Total		112.1		63.0		67.2	388.4	492	
Total Industry						on State			
Production and Storage	111.6	124.5	120.4		69.7	73.8	455.1	510	
Transmission	573.5	650.8	586.0	126.2	47.7	44.1	1454.8	1537.	
Distribution	239.7	257.7	245.4	214.3	199.7	193.7	1110.8		
		33.4	29.4		15.5	9 15.3	114.5	109	

ISS

Some practical suggestions for closer contacts with the "middle-men" in utility finance

Keep the security analysts posted



Personal approach: H. C. Moore, Jr., (center) NEGEA, chatting with analysts

By JOHN F. CHILDS

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Assistant Vice-President
Irving Trust Co., New York, N. Y.
Chairman, Program Committee
New York Society of Security Analysts

A few utility managements have learned the importance of good investor relations the hard way.

However, most of them without sad experiences are coming more and more to realize the importance of good investor relations. The fact that gas and electric companies have had to raise large sums to meet construction requirements is responsible in a large measure for their increased interest in keeping financial agencies advised. Only utilities have the funchise obligation to meet new demands year after year. No other industry is required to come to the money markets so frequently. Moreover, the goldfish bowl environment in which it lives makes the problem only one of serving up in palatable portions information already available in various state and federal commission offices.

The purpose of this article is to discuss probably the most important part of an investor relations program—building relations with the security analysts.

Here are some of the advantages of a program of closer cooperation with the analysts:

(1) For a new utility such a program will more quickly familiarize a large group of investors with the company and thus shorten materially the period required to season securities.

(2) Even for a mature company it will assure a continuing interest on the part of investors, and will broaden the market for that company's securities.

Today there is real competition for the investor's dollar, particularly for equity money. Investors are more inclined to place their money and pay higher prices for securities of companies with which they are kept continuously and fully informed. In periods of uncertain market conditions, investor good-will may mean the difference between success or failure of a particular offering.

Help for investors

(3) Closer relations with the analysts will assure that a more accurate price is placed on the securities of a company—investors will have more prompt and detailed information on which to base their judgment. This should benefit the entire investing community and our economy.

(4) A program of closer relations with security analysts will acquaint investors with the real significance of developments, thus preventing unnecessary adverse market action in the event operating results are temporarily unfavorable.

(5) It will facilitate approval by securities holders of such matters as changes in the company's charter or terms of a particular security.

Some of the disadvantages of an investor relations program are:

(1) Time and effort is required of the company's personnel, depending of

course on the extent of the program.

Experience of Southwestern Public Service Company is a good example. This company has carried out a very extensive program of investor relations for a number of years and has arranged meetings in most of the principal cities throughout the country. The vice-president and secretary spends about one-quarter of his time on investor relations, and the chairman spends a moderate amount of time in talking to groups. Work required by the office staff is not unusually burdensome.

(2) A disadvantage, it might be considered an annoyance, is the number of unreasonable requests for information which are sometimes made by analysts.

Considering the advantages and the fact that the disadvantages are not too serious, it appears to be almost a necessity for utility companies to develop a continuous program of investor relations. However, this article should not be considered as an effort to burden utility executives with more work, but is primarily for the purpose of pointing out what has already been successfuly tried by many companies.

Where does the security analyst fit into an investor relations program? How can the utility keep the analysts informed?

How can a definite program and contact list be developed?

Generally speaking, investors and their advisers fall into two broad classifications —uninformed and informed. Security analysts probably represent the most im-

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• A scientifically planned program of investor relations, based on building clouds

portant part in the informed investor group.

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Analysts are found in practically every organization concerned with investing money, advising others on investments, or dealing in securities. Analysts may not be the men in the front office making the final decision, but they are a very important group to cultivate. They are the group that gathers the information, studies it, pulls it apart, and uses it to write up their reports and make recommendations to the front office. Their reports on your company, recommending the purchase or sale of your securities, may have very broad circulation and an important effect on the market action.

There are many degrees of specialization among analysts. Some, because of the small size of their organizations, may cover many industries. In other organizations, one or more analysts are assigned to the utility industry alone. In a few cases, one analyst may even specialize in a certain number of utility companies.

Unfortunately, there is a variation in the quality of the analysts. There are those who are in a junior position just learning the business. Others, even though they have had sufficient experience, lack good judgment. A company must accept this annoyance as one of the problems of investor relations.

It may be difficult for a company to guess what information the uninformed investors want and will understand. Not so with the analysts. A utility can readily determine the type of information the analysts want, their prejudices which must be overcome, and whether they are being kept sufficiently well informed.

These facts can be determined by getting to know and keeping in close touch with a few analysts—five will give a good cross-section.

This approach was tried out by a particular utility in connection with the preparation of their 1949 annual report. Five analysts were asked to review the 1948 report. They were then invited to a special luncheon arranged to meet an officer of the company. In its 1948 annual report the utility had done an excellent job of including a ten-year spread of operating results and earnings, designed especially for the analysts. The officer felt that for variety it would be well in the 1949 annual report to show the same figures in five-year intervals, 1939-1944 and 1949. The analysts stated unani-

mously, however, that if the figures were to be included, they should be for each year.

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Early in 1950 the public utility department of Irving Trust Company made a brief survey of 34 analysts to determine their views on methods of presenting 6 nancial information. Results of this survey were made available to the utility industry and will be referred to in the following discussion.

Personal contacts

The importance of personal contacts cannot be overemphasized. Unfortunately, many analysts are not able to visit utility companies on their own time. Therefore it is necessary for utility managements to take the initiative in building personal contacts with the analysts. This will serve three purposes.

First, the quality and character of the management plays a part in evaluating a security. Financial figures do reflect the effectiveness of the management but an additional appraisal can be obtained by personal contact. Second, bare figures may tell only part of the story. Many of them take on an entirely new aspect when there is a complete discussion and an explanation of special circumstances justifying any deviation from the averages. Third, personal contact will stimulate continuing interest in a company's securities.

One of the principal media for personal contacts is for a company to present its story through analysts' societies. The operation of each of these societies differs widely, as well as the type of company in which the members are interested. For example, the New York society usually devotes one of its four meetings each week to a different utility.

The New York meetings are best adapted to relatively large companies, in which there is a wide interest. Whether the securities of the company are high grade or not is unimportant. On the other hand, the frequency of meetings of the other societies is different and there is a variation in the type of securities in which they are interested.



Company guide conducting group of security analysts through gas plant in the New England area. Experience has proved that such trips enable the analysts to meet company personnel and to learn firsthand how the company stands in its community

^{*}There are now nine societies, as follows: Botton Security Analysts Society, Analysts Club of Detroit, Montreal Institute of Investment Analysts, Financial Analysts of Philadelphia, Ivestment Analysts (2010 of Chicago, Los Angele Society of Security Analysts, New York Society of Security Analysts, St. Louis Society of Financial Analysts, St. Louis Society of Financial Analysts, Security Analysts of San Francisco.

g clos contacts with the security analysts, will help utilities to simplify the raising of capital

At the analysts society meetings, it is preferable to have the president of a company speak since he is in the best position to represent the company and answer questions. Many companies appearing before the New York society have also had some of the other top officers present. While this is by no means necessary, it does make a favorable impression.

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The Irving Trust survey asked the 34 analysts how often a company should give a verbal presentation of its story at either the Analysts Society of New York or a large meeting arranged by the company. Two analysts said—every six months; 17 replied—every year; 11—every two years. Four analysts ignored the question.

This frequency of appearance will depend somewhat on the circumstances surrounding the company. If there are material changes in the company's affairs, then an annual appearance is advisable. However, a company which is very strong financially and which has made normal progress may not need to present its story more often than every second year.

There are other ways in which a company can tell its story to a large group of analysts. A number of companies have arranged large luncheons in New York with the analysts as their guests. The Columbia Gas System, Inc., each year sponsors an effective luncheon of this type. Minneapolis Gas Company tried this same idea in 1949 and had a most successful meeting.

Large gatherings are important in order to get broad coverage. On the other hand, there is also an important place for small informal luncheon groups with from five to 15 analysts. The company officer presiding at such a meeting either can take a few minutes to bring the analysts up to date on current developments or leave the meeting entirely open to questions. This type of gathering makes it possible for the analysts to get to know the company executive on a more personal basis. Small luncheons may be used by an executive, prior to a large

For a smaller company which does not have a wide financial following, a small luncheon may be much more effective than appearance at an analysts society.

meeting, as a trial balloon to see what

Information meetings for prospective purchasers, held prior to an offer of securities, afford a real opportunity to present the company's story. Many analysts watch carefully for announcements of these meetings. It is well for a company to have such meetings, frequently referred to as due diligence meetings, in a metropolitan center which is accessible to a large group of financial people. The top executive should take some time to present a real story of the company's financial operations and not just resort to turning the pages of the prospectus.

If a company does not offer securities at public bidding, it might be well to have the underwriting house assemble a group of utility analysts for the president of the company to talk to. Many annual meetings are attended by analysts and they are bound to be impressed by the way a president handles the meeting.

Inadequate preparation and rehearsal for these meetings may result in an unfavorable impression among the financial community. Timing of a presentation is perhaps the most important factor. In the New York Society of Security Analysts, an effort is made to have the talks

last not more than 30 minutes and the question period another 30 minutes.

One thing which must be kept in mind in giving talks before groups of analysts is that it is difficult to keep the remarks "off-the-record." Many of the organizations which the analysts represent have branch offices throughout the country and news travels fast. For this reason the New York Society of Security Analysts has ruled that all of the meetings will be onthe-record so that a company will be forewarned.

Calls on individual analysts are time consuming. However, it is almost essential to include at least a few personal calls each year on such organizations as the financial services, and perhaps a few of the investment organizations which are large holders of the company's securities.

One way to handle such calls is for the president or chief financial officer of a company to have a form letter sent out when he expects to make a trip to a large financial center. The letter could ask a few analysts whether they would like to have the executive call on them personally or cover any questions by telephone



▲ Telling the company's story: Hall M. Henry, NEGEA Service Corporation official, addressing security analysts' meeting in Boston. Participation in meetings of this type is one of the principal methods of building relations with the security analysts.

questions will be asked.

when he arrives, or whether any additional information is needed at the time.

A number of utility companies have successfully arranged for analysts to tour their properties and territories. As an example, the Southern Company arranged a trip in 1949 which was an outstanding success and gave the analysts an opportunity to see the surprising industrial and community developments in the South.

Four things can be accomplished by

such a trip:

(1) It gives the analysts an opportunity to get to know the executives on a personal basis.

(2) They can meet all the people who are responsible for the company's operations and not just the financial men.

(3) They can see the company's territory which is most important in finan-

cial analysis.

(4) Some companies have arranged for analysts to meet regulatory authorities and leading industrialists in the area so that they can see how the company stands in its community.

While trips have been effectively arranged with a large number of analysts, it is probable that best results can be obtained with groups of 25 to 30. A smaller trip might be repeated every year or so with a different group of analysts to get the story across to the financial community on a continual basis. Every analyst who goes on such a trip is bound to spread the story around to his comrades.

If a company serves a relatively compact territory and is not too far from a large financial center, a short trip including analysts and a group of underwriters may be very effective at the time of the sale of securities. Such a trip, of course, serves a special purpose and is more in the nature of an extension of the due

diligence meeting.

There is relatively little difficulty in

Welfare state

The government, It's probably true, Will take care of me And take care of you,

> Take care of our birth, Our marriage, our death, Take care of our first And our final breath,

Take care of our thoughts, Take care of our rent . . . But who will take care Of the government?

-Tex Outlook

arranging meetings and getting up lists of analysts to invite. Your service organizations, commercial or investment banking friends, should be willing either to give you advice or direct you to the appropriate officer of the analyst society.

Various types of written material can be used to keep the analysts informed and interested in a company's operations.

Probably the document most widely used by analysts is the annual report. While the report must be written for a large audience, practically every utility company attempts to design at least part of the report to interest the trained financial expert.

Annual report data

Minnesota Power & Light Company gained considerable good will among analysts by including a page of statistics entitled "Figures for the Analysts." Atlantic City Electric Company included in its annual report a separate sheet entitled "For the Analysts." This included many of the ratios which the analysts use and also received favorable comment.

Quarterly reports are probably the most effective way to keep the analysts currently informed. They are practically unanimous in wanting a statement in the quarterly report of events which have happened since the previous statement. Most analysts also agree that a balance sheet should be included, and more and more companies are furnishing such information. A well prepared quarterly report may cut down the number of letters from analysts requesting information. Monthly earnings are desirable and closely watched by analysts. As shown by the Irving Trust Survey, analysts are quite definite in the earnings periods they prefer in interim reports.

Most analysts like to receive annually a special statistical booklet prepared especially for the financial expert. Many companies have done an excellent job in this respect. Such booklets do not have to be showy, but should include information the analysts want and not leave out pertinent data.

The insurance company report, which at one time was confidential, is now being distributed rather widely to analysts and is a valuable source of information. When revised, it may well reduce the necessity of preparing a special annual statistical report for

analysts. However, it is quite possible that some companies which have been preparing special annual statistical te. ports for analysts, will wish to include along with the insurance company is ports, some information on special features of their operations.

Press releases on factors concerned with financial matters, such as wage increases, etc., are of real interest in analysts. They prefer to receive the full press release from the company rather than rely on the revised story as condensed in the newspapers.

Some companies send their house organs to utility analysts. Unless the publication contains information of & rect interest to the analysts, it might be preferable to send out marked cop. ies of only those issues which have ar-

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ticles of special interest.

Some of the material presented at SEC and FPC hearings is of great in terest to the analysts. A few visit the offices of these commissions at regular intervals to pick up interesting information. A company could build up its relations with analysts, if the opportunity presented itself, by sending them brief excerpts of testimony bearing on financial matters, assuming that this could be handled briefly and without too much trouble to the company. The same applies to material presented before state regulatory commissions, or decisions by such bodies.

Written material to hand out at talks before analysts groups includes booklets and copies of the speeches. It is also well to comment on movies. slides and wall charts. If an official of a company is a gifted speaker, no visual material need be used. However, even with an outstanding speaker, supplemental material may serve a useful

There have been a few well done films. However, in some instances movies have been prepared for other purposes, such as for employees, and have proved of no real interest to analysts. Furthermore, they consume time that might be devoted to the financial story about the company. In addition, many meeting places are not suited for show-

A film might be best adapted for a special meeting at which the company did not intend to cover all phases of its operations.

Movies seem most useful to get across the story (Continued on page 62)

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Old Stove Round Up time is just

around the corner. The gas industry is out to beat last year's record of 1,200,000 gas range sales during the campaign, which is scheduled for September, October and November 1950. Early indications are that about 600 gas companies throughout the United States and Canada, more than 40 gas range manufacturers and up to 40,000 appliance dealers will participate in the program. This will make the Round Up the biggest sales promotion campaign ever conducted in the gas industry.

A. G. A. national advertising during the period will be closely tied to the program with effective Old Stove Round Up layouts in black and white facing fullcolor full-page and half-page gas range advertisements. In addition, many gas range manufacturers have scheduled Old Stove Round Up national advertising of their own. The "CP" Division of Gas Appliance Manufacturers Association will schedule a series of advertisements in trade publications urging appliance dealers to participate in the campaign, and will also send direct mail pieces to 40,000 appliance dealers throughout the country.

Four-color as well as black-and-white advertising will appear in the women's and shelter group of magazines in September, October, November and December. National magazines included are: Ladies' Home Journal, McCall's, Saturday Evening Post, Woman's Home Companion, Better Homes and Gardens, Woman's Day, Family Circle, American Home and Parents magazine.

Objective of the campaign is, of course, the replacement of old stoves with new automatic gas ranges. It is estimated that more than 60 percent of the

gas ranges in use are more than ten years old. In last year's Old Stove Round Up many cookstoves in the 30, 40 and 50-year age brackets—and some even more ancient—were replaced.

While the basic idea of the campaign is a contest to locate the oldest stove in any given territory, many twists were put on this idea by various companies last year. One company offered a prize for the "newest" old stove turned in during the campaign, as well as for the oldest. Another utility, in cooperation with three newspapers, ran three different contests simultaneously. The first was a straight old stove hunt. The second was a "pot luck" contest in which every contestant won some sort of prize, ranging from a toy balloon to a brand new automatic gas range. The third was a contest for youngsters in which they had to transform their wagons into "chuck wagons." In each of the contests, the entry blank

SELL 'EM COMFORT



ISSUE OF JULY-AUGUST, 1950

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A. G. A. General Promotional Planning Committee at Association headquarters on June 9: (Left to right around the table) J. J. Quinn, F. X. Mettenet, C. C. Barnes, D. W. Reeves, Fred Westin, J. W. West, Jr., A. G. A.; Frank C. Smith, chairman; H. V. Potter, A. G. A.; W. L. Ligan, H. P. Morehouse, Harold Massey, GAMA; R. M. Perkins, Irving K. Peck, George Jones, George A. McDonald, A. G. A.; (rear row) Walter F. Muhlbach, H. Leigh Whitelaw, GAMA; C. E. Hall, F. W. Williams, A. G. A., New York. Gas sales strategy for 1950-1951 was mapped

required pertinent information about the entrant's present stove, including make and age. This information was subsequently passed on to all dealers for their follow-up.

Cowboy parades, television programs, airplane advertising, theater tie-ins, chuck-wagon demonstrations and many other unusual forms of advertising were employed by various dealers and utilities in addition to the usual media to dramatize the sales campaign.

Even more dramatic and more widespread promotions are expected to be used in this year's campaign. Many utilities have already laid detailed plans for their participation.

Some of the new items being offered by A. G. A. in connection with the Old Stove Round Up this year suggest new ideas that can be incorporated easily. For instance there will be a toy gas range containing a complete set of toy aluminum cooking utensils which will be available. These sets can be used as prizes in children's essay contests on "Why My Mother Needs a New Gas Range," or as premiums to be given to the girls in a family which buys a new gas range during the campaign.

Gary Cooper, star of Warner Bros. forthcoming Technicolor western film,

"Dallas," will be used on a full-color window and store display piece available for the campaign, and on some other materials. Mr. Cooper will also be used in the newspaper advertising mat service for the Round Up.

Other items in the campaign include balloons, an aluminum cooking utensil set, jumbo price tags, continuous banners, pennants, streamers, small display pieces, 24-sheet billboard posters, cowboy hats, lariats, an aluminum baking set, bowl covers, etc.

The majority of utilities and deales plan to stage Old Stove Round Ups in the last four months of 1950. Because of seasonal variations in selling periods several Southern states will launch drives in July and August. The Pacific Gas Association, comprised of gas utilities in the 11 West Coast and Rocky Mountain States, as well as Hawaii and part of Western Canada, will start unified Old Stove Round Up drives October 2.

A broadside will be mailed by GAMA in mid-August, outlining the program to some 30,000 dealers. Trade paper advertising will announce the program to dealers, pointing out the tremendous profit possibilities in the sales of gas ranges. Recent surveys indicate sales of the better grade of gas ranges offer 30 percent more profit than any other major appliance.

• Two major A. G. A. promotional campaigns currently in progress are the "Sell 'Em Comfort" promotion on house heating, all-year air conditioning and incineration, and the "Clean Sweep" promotion on gas refrigerators.

Both of these campaigns are scheduled for July, August and September. Both already have been started locally by many utilities and dealers.

Another forthcoming campaign, set to run concurrently with the Old Stove Round Up in September, October and November, is the "Proof of Profits" promotion designed to replace commercial cooking equipment with the latest gas appliances. (See page 20). This is the first A. G. A.-sponsored national campaign in commercial cooking. All three drives are PAR Plan activities.

Commercial "balance wheel"

By FRANK C. SMITH*

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President, Houston Natural Gas Corb., Houston, Texas

To prepare a review of commercial gas air conditioning is much simpler and easier than to make a forecast of its future. The subject is so new by comparison that not a great deal has been said or written about it, and nearly all of that is available for reference.

Since commercial establishments are those in which business is carried on, except manufacturing (which we class as industry), therefore commercial air conditioning becomes an item of business equipment, it should be and is regarded from the viewpoint of performance and cost. Other subordinate items are to be considered, of course -space requirements and building design, for instance—but, primarily, performance and unit cost are the governing considerations. We find from experience that equipment is already available to meet most of the commercial requirements of gas air conditioning, but not all of us know about it. We learn from inquiry that additional equipment and adaptation of present equipment are in prospect, and it is the purpose of this paper to discuss both.

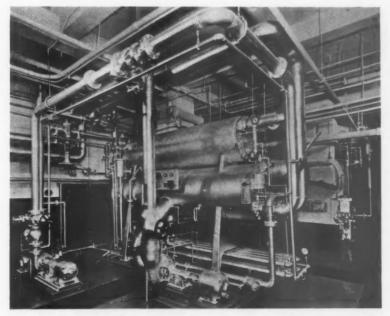
Cooling and drying of the air are the two principal functions of summer air conditioning systems—cooling by refrigeration and drying either by refrigeration or by absorption. Refrigeration dries air by condensing its moisture in the process of cooling it; absorption dries it by utilizing a chem-

ical solid or liquid with a high affinity for moisture. Refrigeration equipment, as applied to comfort air conditioning systems, is of two types: (1) mechanical compression, and (2) heat-operated absorption. Steam jet refrigeration is considered a non-mechanical system, using steam to compress the water vapors when water is used as a refrigerant.

Dehumidification or dehydration equipment passes air through an agent, either a solid such as silica gel, or a liquid such as lithium chloride. Gas as fuel furnishes heat for operating to the several types of equipment, either by direct burning or to generate steam at some external source.

All-year gas air conditioning may utilize any of the above methods of air cooling and drying in conjunction with a conventional method of air-heating using gas as fuel.

If it may be assumed that air conditioning equipment is sold by the manufacturer at an average of \$250 per ton, then about one million tons of all kinds have been installed annually since 1945. Though residential air conditioning has been increasing rapidly, the great majority of the five million tons installed in the last five years has been commercial and industrial. Commercial installations were principally in offices, stores, restaurants, theatres, Pullman cars, hotels, hospitals and many other establishments. These applications have been so general and widespread that the American public can truly be said to be "air-condition-

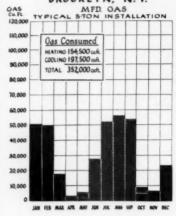


Gas summer air conditioning provided by this absorption machine installation makes comfortable working conditions in the Oklahoma Natural Gas Building

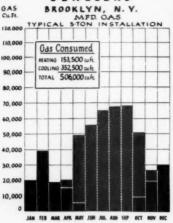
⁶Chairman, A.G.A. General Promotional Plan-ning Committee.

Abridged version of paper presented at A.G.A.
Sales Conference on Industrial & Commercial
Gas in St. Louis, Mo., April 4-6, 1950

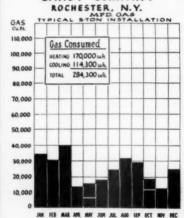
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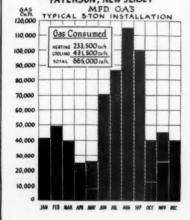




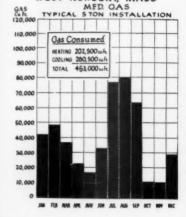
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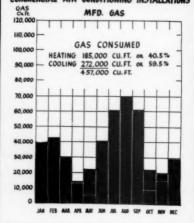
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DRUG STORE WEST ROXBURY, MASS



AVERAGE MONTHLY GAS CONSUMPTION OF THE 5
COMMERCIAL AIR CONDITIONING INSTALLATIONS



ing conscious." Air conditioning in now regarded as an essential, integral part of many such businesses. Not only does it appeal to the store's customer and the hotel's guest, but its effect is vast upon employee efficiency and ne duction in personnel turn-over.

Prior to World War II much ex. perimental work toward developing gas air conditioning was done by Mills, Bryant, Williams, Surface Com. bustion and Servel. The latter four produced and offered equipment which has been giving service during the years since. Specifically, Bryant's equinment utilized a chemical solid, silica gel, with high affinity for moisture the use of which is principally confined thus far to process air conditioning, and as such, is omitted from further consideration here. Williams developed Air-O-Matic, a year-round absorption type conditioner of which about 70 units of equipment, totaling about 2,500 tons capacity, were installed.

Surface Combustion Corporation has developed its Kathabar equipment, using lithium chloride, as a system of humidity control to be supplemented by air-cooling and heating by other means, if desired. Numerous applications have been engineered and installed. Kathabar installations are both commercial and industrial, with more than 300 of its packaged units installed, plus numerous "tailored jobs." They are continuing field testing and redesign of their residential unit. Both the commercial and residential approach is to accomplish a 45 percent relative humidity with controlled temperature of 78°, which is the combination they have found to give most satisfactory results. The modern office building of the Kellogg Company at Kalamazoo, Mich., and the Shamrock Hotel in Houston are recent installations, the latter, its guest rooms only.

Freshness as well as comfort is the Kathabar appeal. The advantages of humidity control to process as well as comfort air conditioning are many and obvious.

Servel did extensive prewar development work and field testing, and its earliest units were sold and installed in 1939. After the war, additional impetus was given its development. Its three-ton and five-ton sizes, adaptable to commercial installations as well as residential were installed in large num-

AMERICAN GAS ASSOCIATION MONTHLY

bers, chiefly in the Southwest and West, where gas usage was not limited by state restriction. More than 6,000 Servel units have been installed since 1939 in residences and commercial establishments, and the proportion of the one to the other is not easy to determine. However, it is certain that most of these installations are commercial, and this installed capacity can be estimated conservatively at 20,000 tons, probably more.

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Carrier Corporation, the pioneer of the air conditioning field, since the war has widened its scope to include absorption equipment utilizing gas, available in units of 115-ton to 300-ton capacity, capable of multiple unit installation as needed. Carrier's installations of gas-fired absorption equipment since 1945 are 15 in number, totaling 2,300 tons, the largest of which is the 600-ton installation of Lone Star Gas Company in Dallas. Carrier lists 18 contracts already made for installations beginning in 1950, totaling 4,515 tons. The largest, of 600 tons, is located in the Oklahoma A & M Student Union Building at Stillwater. One foreign installation of 150 tons in Buenos Aires, Argentina, is also noted. Of these 18 installations to be made, only six are of less than 200 tons, showing a trend toward larger capacity.

Commercial gas air conditioning, therefore, can be said to have come of age, even though it is far less than 21 years old. While of the millions of tons of air conditioning now operating in the United States only a small part is activated by gas, it has in its several applications certain inherent features of superiority which assure its further and larger encroachment on the field.

Gas-activated equipment of the absorption type especially offers freedom from the noise and vibration of the reciprocating and high-speed apparatus and affords wide flexibility in its location. It embodies the benefits of practically no moving parts, with a lessened wear and resultant repair. Its operation is cheaper, its life longer, and depreciation cost less than the conventional equipment. But in addition, its load factor features especially are attractive to electric and gas utilities alike in certain operations, and perhaps in nearly all.

A recent study by W. F. Friend, consulting engineer for Ebasco Services,

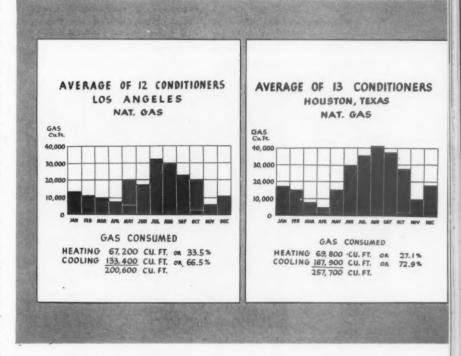
Inc., relates to the increased demand upon electric generation imposed by summer air conditioning load. He states that the combined cost of the generating plants, transmission and distribution facilities for this added load upon the summertime peak is \$220 per kilowatt of demand metered to the customer. Annual fixed charges upon this investment at ten percent are \$22 per kilowatt year. At two cents per kwh, the average revenue per kilowatt year is \$30, leaving only \$8 for all expenses of operation from generation to delivery.

By contrast, says Engineer Friend, comparable air conditioning systems

utility than with the conventional compressor units.

If this can be made known generally to the electric utility industry, including combination companies, the way will be made vastly easier for acceptance and use of the absorption equipment. One utility company known to me has already accepted Mr. Friend's theorem and has given its blessing to a 115-ton Carrier installation recently contracted for.

Louis Ruthenburg, chairman of Servel, Inc., and his associates made similar studies several years ago, with like conclusions. Understanding and acceptance of these facts by electric



of the absorption type, with auxiliary use of electricity for controls, blower, and the like, have an electricity load factor of 20 percent as compared with 17 percent for the motor-driven equipment, with an annual revenue of \$35 per year. This, after the fixed charges of \$22, gives two-thirds more return than from the compression units. Therefore, Mr. Friend concludes, unless electric rates should be made to compensate for the lower load factor, summer air conditioning with absorption type installations will continue to be more favorable to the electric

utility companies will remove one of the greatest items of sales resistance offered to air conditioning by the absorption equipment.

To remove heat by the use of heat, as in the Servel refrigerator, now one of the most effective instruments of our industry, can be recognized as the standard of air conditioning practice. Here is a great sales job for our industry and American Gas Association. I predict that it will not be overlooked in making our promotional plans for 1951. To raise the summer valley and improve this (Continued on page 60)

Employee training leads fig

Most of us like the benefits we receive from the American way of life. Very few would exchange our right to live in this country for the privilege of living in any other country. Therefore it seemed only natural when our employees asked about the "American way"—how it differs from other systems—what makes the American economic system "tick"—and what is meant by talk that the American system is in danger of the "Great Plague?"

That is why the American economic system is the subject for Wisconsin Power and Light Company's 1950 employee information program. It is a program deBy W. D. BAKER

Personnel Director Wisconsin Power and Light Co. Madison, Wis.

erating over a large area. Our 1,650 employees are scattered over 14,000 square miles—156 miles east and west, and 204 miles north and south.

A successful program had to be one that could be easily administered, that didn't require special instructors, one that didn't take so much from the day's work that it would disturb our primary job of furnishing service to customers.

arguments that follow each meeting tell most eloquently the way the information has registered.

This program consists of five sessions of about an hour and a quarter to an hour and a half each. Each session is presented by means of a 35 mm colored strip film followed by a conference-type discussion on the subjects shown.

While the film tells the whole stor, experience has shown that the best results are achieved when a discussion leader adds explanatory remarks. In order to make discussion leaders of inceperienced men, a leader's manual or guide is supplied with each strip film

Main office meeting with toy models to illustrate American productivity



Line employees
discussing
"how well do
we share
our wealth
and income?"

signed to explain, simply and understandably, the basic facts of an economic system—what it has to do—how it can do it—how our system was designed—its difference from most current systems. The program is designed to show in a graphic and conclusive way how well the American approach has succeeded in meeting the real test of any economic system—concrete results.

For a long time the officers of the company had been seeking a method to answer these requests for information. We are a small rural type company op-

We couldn't find any such program. Other companies were making the same search with no better luck. Finally one individual from each of ten companies was selected to work with officials of Middle West Service Company to develop a program that would meet our specifications. This group spent many months developing our present program.

The real problem became one of finding a way to present down-to-earth information in a way that would register. Now we have such a program! Already each of our employees has attended at least three sessions on the American Economic System. Intense discussions and Our leaders run the entire gamut of our supervisory staff—line supervisor, meter engineer, chief draftsman, district manager, sales manager, auditor, advetising supervisor. Discussion leaders preside over groups of from 15 to 30 enployees and get a kick out of meetings

After the first film was developed—in fact, while it was in the making, we were faced with the problem of the best method of presenting the entire program. Should we use our regular training department men; develop a corps of well adapted younger men with special training; or use supervisors—the men in the line organization instead of staff en-

Based on a talk presented during A. G. A. Great Lakes Personnel Conference in Chicago, Ill., on March 10, 1950.

fig gainst the "great plague"

ployees? We chose the last approach and are more than pleased with the results.

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Leaders of our program are truly the leaders of their groups. Other employees respect them and have confidence in their judgment and integrity. When they don't know the answer to a question and say so, the reaction is natural. Another important benefit is that the line organization can arrange their own schedule of meetings to fit in with the day's work with the least inconvenience and lost time.

Next step was to get the leaders to help with the final revision of the strip films. Questions were answered. Suggested brought out spots in his presentation that the leader felt needed strengthening. It showed him the advantage of being certain everything was set beforehand so that his meetings would run off smoothly —brought to light any defects in his equipment—increased his self-assurance and confidence. It made his job easier.

Experience has proven that the best results were secured and the greatest interest shown when each group received a short historical review before the first session. We use a very short history of previous civilizations as far back as the Egyptians, centuries before Christ.

From this, it moves on to the development of an economic system. Everyone attending agreed that any economic system, American or otherwise, must:

(1) Force or persuade the people to work so the group will have the goods and services they need.

(2) Decide what goods and services and how much of each should be produced.

(3) Decide who shall produce what goods and services.

(4) Determine how the goods and services produced by the group shall be distributed among the members.



District group
discussing
film on the
development of
an economic
system



changes were discussed and frequently followed up. Many of the leaders were more critical than any of the audiences they later faced. Then the final edition of the film was reviewed, copies of the leader's manual were passed out, and the leaders went home to present the program to their own people.

Each operating group had their own film projector and screen that they used regularly in their supervisory training programs. Each arranged to hold their meeting in satisfactory quarters with comfortable seats. Nearly every one of the leaders put on a preview before a small audience to get the feel of the program.

That short preview did wonders. It

This resume points out the growth and development of each of these civilizations as long as individual initiative and responsibility existed. In addition, it explains how each civilization began to decay when it became infected with the "Great Plague" of depending on the government for the solution of all problems.

A ten to twelve minute review of history's ups and downs brings out the realization that we are faced with a similar situation today—that before we make an irrevocable choice of the road we want to follow, we need to secure all the information.

Film No. 1 gets down to basic grass roots, starting with the pioneer who had to grow or make everything he needed. Our forefathers, in making the first decision, chose reward as against the force used in many other systems—reward based on five key principles.

- (a) Private property—the right to keep what you make and use it as you see fit as long as you do not damage others.
- (b) Free market—freedom to buy from the lowest seller and sell to the highest bidder.
- (c) A profit-and-wage incentive—rewards for your efforts.
- (d) Competition except in definitely specified lines.
 - (e) Government regulation, not gov-

ernment operation. Government the umpire-not umpire and player.

All employees-in fact everyone who has seen the program-was thrilled at the dramatic way the success of the American system was demonstrated. Molding clay, toy phones and autos, small bags of coffee and blocks of rubber are used as visible proof of the superiority of our system.

Our demonstrations were carried out as follows: Americans-one-fifteenth of the world's population (15 were set apart at each meeting, one representing America—the other 14 the rest of the world) -held only one-sixteenth of the earth's surface (one-sixteenth of a clay pie to the American-the other 14 got fifteen-sixteenths). Then the results-the 14 got one auto to share among themselvesthe American received three. The 14 had one telephone—a 14-party line—the American one phone for himself. Each of the 14 received a small cellophane bag of coffee and a small block of rubber a piece. The American, 14 sacks of coffee and 14 blocks of rubber-so on through the demonstration.

And the reason for this development is the individual freedom our constitution gave the American people which released their pent up drive for their own advancement. The demonstration definitely registered, whether at the gas plant, with street crews, or with a group of professors at our State University.

Discussion sessions that followed the

showing of the first strip film found nearly everyone taking part. Summarized, they amounted to this:

Our American system has certainly produced the goods the group needs and wants. It is a wonderful success in that respect-but how well do we share what we produce? Consequently, this point of sharing was made the subject of Session II.

Basis for answering the question "how well do we share our wealth and income?" was the Survey of Current Business issued by U.S. Department of Commerce, National Income Division, and the well known survey National Income and its Distribution by Rev. Edward A. Keller, C.S.C., University of Notre Dame.

This session, like the first, created many discussions. The big surprise was how widely and generally our enormous production is distributed. Some 64.6 percent of the national income goes to employees-the fellows who made the stuff. When the percentage of the national income that the landlord gets-4.06 percent-was learned, we heard remarks like, "Gee, is that all we get from our flats"-or-"Bill, you're not such a blood sucker as we thought."

When employees heard the stockholder's figure of 4.15 percent, we had many similar comments. Many employees recognized themselves or friends as belonging in all three groups.

This survey showed that slightly less

than one-eighth of the national income for payment for the ownership of prop. erty. This fact was further emphasized by the Notre Dame study which showed that individuals receiving less than \$100 per week receive practically 73 percent of this property income-69.4 percent of all interest and dividends, and 83.1 per. cent of all rent paid to individuals. When we learned that after income taxes persons earning less than \$100 per week get 90.2 percent of the national income everyone agreed that the American sustem does a swell job of dividing the national income.

This naturally brought up the question of profits-their size and effect on the cost of what we buy. Everyone agreed profits were necessary—in fact a good thing. None of our employees wanted to work for a company that was losing money. But the big figures reported in the paper looked pretty excessive. They were really big figures.

Again the survey prepared by the gov. ernment gave us all a surprise. The 18year record of all corporations, 1929 through 1946, showed only 3.5 cents profit on each dollar of sales-for all manufacturing concerns, only four cents of profit. Moreover, estimates for 1947 and 1948 of 6.7 cents and seven cents did not bring the average above five cents. Only a nickel on the dollar-everyone agreed—is small insurance for the progress and job (Continued on page 42)

Commercial equipment sales drive set for fall

a PAR activity

HERE'S HOW save money by using modern gas cook-

ing equipment." That is what the gas industry will be saying to the commercial cooking industry this fall when the first nationwide sales campaign on commercial gas cooking equipment gets under way.

Under the intriguing title, "Proof of Profits" Campaign, this hardhitting PAR Plan drive will run from September through November 1950 and will prove that today's gas cooking equipment can increase restaurant

This sales drive is designed to sell more gas equipment, improve the quality of equipment in use and more firmly cement the relationship among gas companies, kitchen equipment dealers and manufacturers.

During the period of the campaign, the national A.G.A. commercial advertising program will be slanted toward the profit theme. Endorsements by highly respected individuals in the food service field will emphasize the value of gas as a profits producer.

The Hotel, Restaurant and Commercial Cooking Division of Gas Appliance Manufacturers Association has set up a "Proof of Profits" advertising program to run during the period of the campaign. These advertisements will appear in the publication Restaurant Equipment Dealer and will show the dealers and their salesmen how the campaign can be profitable to them. The dealers have already been told about the "Proof of Profits" Campaign in talks given by gas men at two of their national meetings, one in New York and one in New Orleans. Both these talks were reprinted in the Food Service Equipment Industry Bulletin.

In addition to promoting "Proof of Profits" in their GAMA advertising, several manufacturers of gas equipment have announced plans to produce special promotional literature for the campaign. They have also expressed their willingness to provide personnel to participate in training programs that are set up by gas companies for their dealer salesmen.

A booklet called "How To Put On A 'Proof of Profits' Campaign" has been distributed to gas companies. Serving as a guide to the gas company in setting up a commercial equipment sales program, this booklet offers a wide variety of suggestions adaptable to local conditions.

A.G.A. has in production a series of "Proof of Profits" mailing pieces suitable for ditribution to commercial customers. In addition, a portfolio is being prepared for outomer and dealer distribution which will point out the profit-making features of the use of gas. Into a pocket in this portfolio the gas company can place appropriate promotional materials produced by A.G.A., manfacturers' literature, and sheets telling about the special local features of the campaign that the gas company will produce.

Sample copies of the portfolio will be sent to gas companies early in August. Included will be a description of the various materials that will be available for the "Proof of

Profits" Campaign.

Three most important jobs face the company that expects natural gas

Natural gas, you and the customer

BY IRVING K. PECK

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Vice-President The Manufacturers Light & Heat Co. Pittsburgh, Pa.

• The following comments are taken from a discussion with gas industry sales executives regarding the part they should play when their companies rereive natural gas. Mr. Peck was a major speaker at the A. G. A. New York-New Jersey Regional Gas Sales Conference in Spring Lake, N. J., June 19 and 20,

His remarks were directed specifically to companies in the New York-New Jersey metropolitan area, but are reprinted in the MONTHLY because of their pertinent interest to other companies throughout the country.

have read glowing accounts in the newspapers concerning the anticipated arrival of natural gas in the New York-Philadelphia-New Jersey area.

My intention is not to agree with or question these statements but (1) to sort of hold your feet on the ground, and to convey to you that the receipt of natural gas in large doses is not a sure panacea for all of your companies' past ills, ailments and insufficient earnings, and (2) to point out that if you are to make a complete success of this new venture, you and your associates will need to work harder than ever before.

I will touch on only those problems that have some bearing on gas sales and appliance merchandising. Moreover, I am writing as a representative of a straight natural gas area operating in five

Now, for the most important jobs fac-

ing a company that is to receive natural gas-natural gas only for the purpose of replacing oil (keeping the same distribution Btu), or for cold enrichment or reforming to a higher distribution Btu than heretofore, or for the proposed distribution of straight natural. These most important jobs are, in order:

(1) Your public relations now and up to the time of any physical change or changeover-your public relations during the period of any physical changeover-and your public relations for some time thereafter.

(2) The physical changes that have to be made in your plants and distribution systems-which I will omit from this

(3) Your determination of future policies regarding appliance merchandising and the acceptance of desirable and undesirable new business that will seek



▲ Like eager fingers, lines of 26-inch pipe stretch to the banks of the Hudson River at Edgewater, N. J., in prepara-tion for the crossing of Transcontinental Gas Pipe Line Corporation's 1,840-mile natural gas artery this summer

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Included materials Proof of

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Tell the public about the many safety measures which safeguard its supplies of natu-A ral gas. Workmen preparing Transcontinental line for Hudson River crossing are shown coating and wrapping the pipe; (right) inspecting x-rays of completed welds

to come on your lines without sales effort, your policy on rates, and the type of new business that you should aggressively go out and get.

There are and will be innumerable other problems. I will touch on some of these as I go along.

In receiving natural gas, any physical changes that are contemplated in your plants and systems are pretty much just a matter of engineering and mechanics, but the mental change of this new thing—natural gas—of any physical change that is to happen, is most difficult for both the public and your employees.

This mental change or preparation of your customers, should be started now, and in the right direction, by an honest continuing presentation of your many problems.

Start now and assign some capable person to feed to your newspapers and employee magazine a constant stream of news bits, construction progress, pictures and statements of the problems and solutions in your receiving natural gas.

At every golden opportunity, appear before service clubs, civic, church and school groups, etc., to tell your interesting story. You can have a public friendly and well-informed ahead of any change. Or you can, by neglect, have a public that only expects the rate to be cut in half since natural gas has twice the Btu of manufactured gas.

After you receive natural gas, you will probably have the same number of employees, the same number of miles of mains to operate, the same meters and bills to render. Your total fixed capital investment will be the same, or more. Your other operating expenses will be

the same, and any changeover and/or changes in plant equipment will be very costly. The public should be told these things now when they are in a friendly state of mind, not later when you may have your hands full of customer complaints.

Tell the public the expense of doing these many things necessary to bring the ultimate convenience of natural gas to them. Convey to the public that you will try to do these things without an increase in rates.

Similarly, convey to the public the idea that with the greatly increased costs of labor, material, etc., the proposed receipt of natural gas may prevent an increase in rates. The public may be expecting great rate reductions from you—it is better to straighten them out now.

Employee cooperation

Be certain that your employees, and especially those that are in daily contact with the public, are well-informed and well-equipped to answer the questions of the public. Give your employees all information. Give them a feeling of importance in the carrying out of your coming program.

Why do I put so much emphasis on public relations, rather than on how to get the customer to sign on the dotted line? Well, without the very best of relationship with your customers, holding their patience and understanding during any changeover or changes, your ultimate base load merchandise sales may suffer. The reason for change from gas to electricity, on the part of a customer, often has nothing to do with price or fuel used.

Competition will attempt to secure as much customer investment in electric base load equipment as possible, before the change or changeover. Make no mittake, aggressive electric competition will take full advantage of any period of confusion or bad public relations that may exist.

Regardless of how much natural gas you are to get, there will be plenty of stift competition from electricity for the cooking load, not only from your local competing electric utility and its dealers, but from the entire electric industry, and from the many manufacturers of electric ranges and water heaters. In straight natural gas areas, where there is stiff electric competition, electric ranges now are being installed in as many as 25-30 percent of the new homes. Also, electric ranges are being included in the construction of as many as 50 percent of the new apartment buildings.

Why? Briefly, in cooking, we have lost some of our advantage, both as to equipment performance and initial price. Besides, in many cases, electric utilities subsidize wiring cost and many packaged sales of electric appliances are made direct from the manufacturer to the builder at high discounts.

Neither now nor when the panacea arrives is the time to let down on sales or selling, to flirt with the idea of going out of the appliance merchandise business. Your base load is at stake. All of your potential rosy house heating sales with natural gas will never make up for loss of base load.

We, in a natural gas area, are endeavoring to meet this stiff electric competition with a general plan, using five points of attack:

- (1) By the use of an adequate sales force, properly trained to contact customers in their home.
- (2) An adequate and properly trained home service department, making frequent home service school contacts and demonstrations. We are constantly upgrading the gas ranges used in our home economics school rooms, following a program directed toward educating both the home economics teachers, and the students (who are to be the future homemakers in our area).
- (3) An intensive dealer program directed toward showing the dealer salemen easier ways to sell gas ranges. This program furnishes the dealer with plans of floor demonstrations to bring traffic to his store. (Continued on page 56)

Reflections of a modern "rib"

By IRENE L. MUNTZ*

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Chairman. Home Service Committee American Gas Association New York, N. Y.

The Eves of today have attained new stature and recognition because of the opportunities that never have been open to women before. After all, the homemaker has changed. She is different from the homemaker of ten or 15 years ago.

There are three major factors in the life of the homemaker we're serving today that are of importance. Today more than ever, women have to learn how to operate and manage a home, and more times then not they wait until they're married to learn to do this.

In a demonstration, you will always find someone who doesn't know how to make a recipe as basic as white sauce, or how to use her range properly. As you know, new homes are being added at the nte of almost a million a year, which means that these new homemakers must be given information not only on how to cook, but how to buy and use their equip-

I mention this particularly because there seems to be no "know-how" carry over from one appliance to another, or even in some cases from an old appliance to a newer model. When a women learns how to operate her automatic washer there is no indication that she will use the same learning process when she gets a new dryer or a new refrigerator. So there is a real need for someone-obviously home service—to help educate these women, our customers.

The second factor affecting the homemaker is that a great many women are working outside the home. This is a much greater factor than most of us have realized. Most of our homemakers are leading a double life. They not only manage their homes, but also hold either a fulltime or parttime job.

Believe it or not, 30 percent of all our workers are women-just under 18 million. It is interesting to know that the only occupation open to women that has

support but towards the family's maintenance.

Women work outside the home because of a professional interest in the job. This may be due in part to the fact that so much of the work formerly done in the home is no longer done there. There is no reason why a woman should spin her own yarn, weave her own cloth and pos-



▲ Irene Muntz (left) demonstrating insulation features of modern gas ranges. Insulating material used to keep range surfaces cool was wrapped around ice cream (shown in foreground), preventing it from melting in hot oven during baking of a cherry pie

not shown an increase in employment is so-called domestic service, which means that mechanical appliances are needed more than ever before. This has great significance for us, because women must do their own work. Hired help is no longer available.

Another interesting fact is that married women constitute the biggest group of employed women. In fact, one-fifth of the working women in the United States are heads of families, many of whom are working not only for their own

sibly bake her own bread. Thus there is more time for her to pursue interests along the line of any technical training she may have had.

'But women work also," and I am quoting from the U.S. Department of Labor bulletin issued in February 1949, "because there is an increasing realization that their participation in the labor force is necessary to the continued development of our standards of living and to the satisfaction of material needs.'

It has always been my firm conviction

^{*}Home service director, Rochester Gas & Electric Corp., Rochester, N. Y. Abridged version of paper presented at A. G. A. Mid-West Regional Gas Sales Conference in Chicago, March 27-29, 1950.

and one of the underlying principles motivating my own work that a public utility is selling standards of living. Every time a new range goes into a home, you can help raise that standard of living because food is easier to prepare, tastes and looks better. Every gas refrigerator that is sold helps keep food better and provides greater variety. When a gas water heater is installed, the family takes more baths, clothes are washed cleaner, and dishes are done in a more satisfactory way. Plenty of hot water gives spruceness to the whole family.

And now we can add the gas dryer,

suggest new and easy ways of doing routine household jobs. We have timesaving to sell in our automatic washers, dishwashers and clock controlled ranges, dryers, and so on down the list.

This time angle has assumed enough importance to draw the attention of the Bureau of Human Nutrition and Home Economics of the U. S. Department of Agriculture: "Buying the so-called necessities of life now takes too heavy a toll of time and energy of many women. There are more women with young children, more carrying on housework plus an outside job and more elderly women today,

"What range shall I buy—will I like this washer better than another—what kind of an ironing board should I buy?"

This indicates also the homemaker, need for guidance, not only in buying but in the use of the thing she does but in the use of the thing she does but R. E. Ginna put it very neatly when he talked at the A. G. A. Home Service Workshop in January.

"Isn't it true and doesn't it follow, he said, "that the home economist, the home engineer economist, is the very consulting engineer, ready, willing and able to do the job as an essential part of the domestic sales organization of the utility." Mr. Ginna added that the future of the home service economist lies in being an integral part of the sales organization and all that such a move implies. And economical role is to educate the prospective buyer before she buys. (Mr. Ginna's talk is reprinted in the February 1950 A. G. A. MONTHLY.)

The women customers we're working with today are not only ready and willing to accept new products, but they've practically been forced into it. Witness the acceptance of Brown'n Serve Rolls. This is a revolutionary way of making everyone appreciate what southerners always knew, that hot breads are a delicious addition to any meal. And what a ludy break that this new idea ties in so well with the gas range business. It is unequalled as a means of showing of quickly what a gas range can do.

Latest figures on the use of packaged cake mixes in the home are fantastic. From a total of 33 million packages sold in 1947, to 91 million in 1948, to the astounding figure of 153 million in 1949. The forecast for 1950 is a probable figure of 170 to 175 million packages!

It really isn't important whether the homemaker measures the ingredients and makes a cake herself, or simply additionable to a packaged mix. The important thing is the time and temperature used for baking the cake in her range. It may surprise you to know that for the average woman, the finished product will be much better when she uses a mix. But even with these mixes the baking results do come back to us more times than you would think.

For instances, we have had many call where the customer complained that he brand new range was not baking well. In discussing this with the homemaker, we might find that the failure was described to the (Continued on page 58)



Home service demonstrators showing a group of housewives and business couples how modern gas laundry and kitchen appliances save time and simplify working schedules

incinerator, house heating and air conditioning to the list. Call these "creature comforts" if you like, but they do make the job of living a lot easier.

The third factor facing homemakers today is integrated with the second. It's the time element. Because so many women are working outside the home, time is most pressing. By giving new services in place of old ones, we really give the homemaker time.

One of the new services we can offer homemakers is an adjustment in schedule so that we can do calls for her when she needs to have them done. Retail stores and grocery stores are meeting the needs of this changed homemaker by rearranging store hours, not only for their customers, but for the store employees, who more times than not are women.

We give the women time when we

while domestic help is scarcer. Shopping has become more difficult because of more goods and a greater variety to choose from, more shops, more people in cities and greater population."

Even as you and I struggle with time, so does the homemaker. Such a simple decision as dessert for dinner involves so much time and choice that instead of choosing between making something herself, using a packaged mix, or buying a bakery cake, the homemaker may decide to serve something like grapefruit, which means no baking load for us.

Readership of consumer publications and reports shows a marked increase, reflecting the needs of these homemakers for help in buying. More and more the customer is depending on a well informed, experienced home service department to answer the question—

Confined furnaces approved

laboratories approval of furnaces and boilers specifically designed for confined space placement where walls and other building structures allow little or on clearance is being granted for the first time by American Gas Association. Architectural trends away from homes with conventional basements, substituting above-ground utility rooms, have imposed space limitations which required new concepts for heating these basementless homes. The size of the heating plant not only has had to be reduced to a minimum, but the space allotted for its instal-

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The problem has been met to a large degree by the use of better insulation in the construction of heating plants and the development of forced air systems. These have made it possible to introduce compact designs which require little space and may be installed close to surrounding combustible structures. Use of forced air has made it possible to place warm air furnaces above ground in utility rooms and in such locations as dosets and alcoves, since the heated air may be delivered mechanically to any part of the house.

lation and operation as well.

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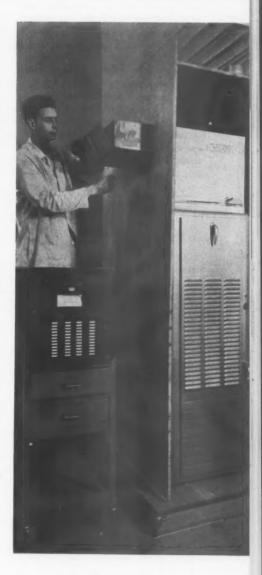
Standards under which conventional obable fig basement type gas heating plants are tested and approved have long specified hether the side and back clearances of six inches dients and from combustible walls. Boilers and furmply add naces so approved have successfully met important normal demands. Closet and alcove type ature used installations with their premium on space ge. It my all for closer side and back wall clearhe avenge ances and even flush-to-wall placement in some instances. Recognizing these mix. But facts, the Subcommittee on Approval ing result Requirements for Central Heating Gas s than you Appliances initiated preparation of additional requirements under which conmany all fined space approvals could be granted. ed that he These new standards were formulated king well with the cooperation of representatives of omemaker Underwriters' Laboratories, Inc. and are e was de closely coordinated with the test procepage 58 mires employed by that organization. Approval of these standards by American Standards Association, Inc. is in process.

Confined space tests of boilers and furnaces are "optional" in that they are applied only at the request of manufacturers who desire approval under such conditions. Otherwise approval tests are made using the conventional six-inch spacing. Manufacturers may select "zero clearance" or in other words, flush-towall placement, or clearances of one, two, three or six inches from walls and ceilings. The new standards are based upon careful investigation of the design and installation precautions essential to safe and satisfactory performance. Two types of approval are granted. One is for units to be installed in closets and the other for placement in alcoves.

Approved units must be labeled clearly as to the type of approval obtained and must specify the clearances under which it is authorized. The type of floor construction, on which the appliance may be installed, whether combustible or noncombustible also must be shown. This information is required in addition to the regular Laboratories Approval Seal, signifying that all American Standard approval requirements have been met.

In practice, a wide assortment of models are being offered to meet the needs of various types of installations and heating systems. Forced air furnaces in particular are being manufactured in a variety of ways to serve modern small home needs. Some furnaces are tall and narrow to effectively utilize overhead space; others are designed to allow for overhead structures. In some designs warm air may be discharged at the bottom of the unit for circulation under floors as in a perimeter heating system. Such specialized types aid in solving space limitations as well as in being well adaptable to new heating and building techniques.

For test purposes, confined space units are placed in an enclosure simulating installation conditions in the field. Wall and ceiling clearances are those selected by the manufacturer except that any part of a draft hood must be kept six inches from an enclosing surface. Ceilings in



Closet type furnace test enclosure. Door contains two ventilating openings the case of boilers may not be more than seven feet, six inches from the floor. For alcove approval the front of the enclosure is left open with the side walls extending 18 inches beyond the front of the unit.

The test enclosure is constructed of wood, finished on the inside in flat black and all joints sealed. Combustible floors are constructed with white pine subflooring, building paper and one-inch tongue-and groove oak flooring finished with clear varnish. For closet installations a simulated door into the enclosure is provided containing two ventilating openings. On page 25 is a closet type unit in position with the door to the enclosure removed.

Ventilating openings in the door are specified in order to allow entrance of combustion air and to provide air circulation within the enclosure. They also permit the escape of flue products from the enclosure in the event of a downdraft or blocked flue. One opening is located six inches from the floor, serving as an inlet, and the other six inches from the ceiling, serving as an outlet. The size of both openings is in conformance with provisions of A. G. A. requirements for the installation of piping and appliances in buildings. These specify one square inch of actual free open area for each 1,000 Btu input rating shown on the appliance name plate.

Warm air ducts from furnaces are connected as high as possible and located to discharge away from the air openings in the door. A duct, directly connecting the space outside the enclosure to the furnace casing, keeps inlet cold air separated from air for combustion and ventilation of the enclosure. This follows good installation practice. Both warm air furnaces and boilers with vertical flue outlets are tested with the vent arrangement, Style I, illustrated below. Those with horizontal outlets are tested with two venting arrangements, Styles II and III

Confined space units are operated under test until equilibrium temperature conditions are obtained. Maximum temperature allowed on combustible walls, floor and ceiling surfaces is 90°F in excess of the compartment inlet air temperature. Temperatures are recorded by the use of thermocouples in contact with inside surfaces of the test enclosure when the unit is spaced away from the walls. When clearance is zero, the thermocouple junctions are placed in contact with the casing of the unit.

Limitation on the temperature of delivered warm air is a most important consideration in the case of all furnaces designed for close clearance installation Both gravity and forced-air models are required to be equipped with controls which will keep the outlet air temperature from exceeding 200 degrees. In addition to the required use of such controls. special tests are also conducted to guard against the occurrence of excessive temperatures when the furnace is required to operate under unusual conditions. These may result from obstructions of either the cold air inlet or the warm air outlet, or from failure of a fan of a forced-air furnace. Should these conditions occur, the limit control is called upon to operate. While the possibility of such occurrences are remote it is nevertheless necessary to make certain that the furnace will operate safely and satisfactorily should they take

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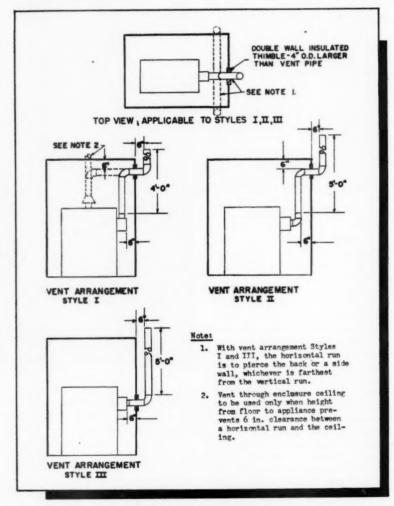
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An important part of testing confined space units is the attention given to detric controls, conductors and other component parts and accessories. Such equipment is employed extensively in moden automatically controlled appliances and the trend is towards its even greater use Consequently its safety and reliability, particularly in confined space installations, must be thoroughly checked. Wiring, flexible cords, insulating material and transformers and other electrical components must meet applicable stand ards for the conditions under which the will have to perform. Maximum opent ing temperatures for the various types of wiring and insulating materials have been established and are checked under test. Maximum temperatures attained such parts as diaphragms, air filters 20 bearings are (Continued on page 34)



Venting arrangements employed for alcove and closet installation tests on gas furnaces

Quotes from spring conferences

A.G.A. NY-NJ REGIONAL GAS SALES CONFERENCE

• D. A. Hulcy, vice-president, American Gas Association, and president, Lone Star Gas Company—



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"Natural gas may seem to be an almost magical answer to some of your problems but you can be definitely assured that it will not be magical enough to halt or even discourage your competition. . . .

"In our section of the country the gas refrigerator, the water heater and the range are the three sen-

tinels which hold our summertime business.... Sound reason and judgment dictate positively that we cannot lose this load. As no one can compete with us in the winter months, we must keep our promotional activities in sound balance and not sacrifice summer appliances for winter advantages in heating load. We must sell—sell with all the facilities at our command. We must capitalize on the national publicity and promotion provided by the PAR Plan by using our own local publicity and promotion, and we must sell and sell directly with our own sale smen and through independent dealers to enjoy any degree of success in the face of the efforts of tremendous proportions which are being put forth by our competitors."

- 0. J. Hartwig, executive secretary, Long Island Home Builders Institute—"Every time you convince a builder that he should use one or more of your products, you also do a promotional job in your replacement and modernization market. The fact that a professional, hard-headed builder uses a certain product or products in his new homes greatly accelerates the acceptance of those products by owners of used homes."
- CHARLES C. OWEN, Surface Combustion Corporation—"We manufacturers of heating equipment can no longer afford to sell our products and the fuel. Back before the war, there were relatively few manufacturers of gas heating equipment—today there are literally hundreds. Today we have to spend all of our time, effort, and money trying to sell our particular products because of the tremendous increase in direct competitors. . . Until 1941 the manufacturers were doing a very comprehensive job . . . and most of our literature, advertising, sales promotional tools and plans included the gas fuel story. We cannot economically afford to continue doing this job if we are to survive the increasingly competitive conditions."

ANNUAL MEETING, GAS APPLIANCE MANUFACTURERS ASSOCIATION

• HUGH H. CUTHRELL, president, American Gas Association, and vice-president, The Brooklyn Union Gas Company—"We're content to set a goal of 3,000,000 ranges for this year. We should be selling 5,000,000! The business is there for us if we really want to go after it. The market is big enough for all of us—bigger than anyone realizes. But the business isn't going to walk up and ask us to wrap it up. Those days are gone—and I say good riddance. . . .

"The meteoric emergence of gas and the gas industry on the national scene has meant publicity for us and for our products on a scale far beyond the reach of even the most powerful and carefully planned publicity campaigns. The gas boom has captured the imagination of the nation. Here then in the field of promotion and publicity alone we have a ready-made stage waiting for our sales drama. The electric industry knows how to take advantage of such a situation. What sort of play are we going to give for our products and our services?"

• Stanley H. Hobson, president, Gas Appliance Manufacturers Association, and president, Geo. D. Roper Corporation—"Our publicity is not reaching the second horizon in our planning—that of the ultimate consumer, the new gas prospect, and the old potential



gas user. . . . Through publicity, and publicity supported with strong national advertising programs, buying habits are influenced. . . . A campaign of publicity fostered by GAMA can be national in scope. It can reach into all states and much of the material will be pointed for use in small town dailies and country weekly presses."

ANNUAL CONVENTION CANADIAN GAS ASSOCIATION

• HUGH H. CUTHRELL, president, American Gas Association and vice-president, The Brooklyn Union Gas Company—"Merchandising gas appliances can pay off. We in Brooklyn Union are strong believers in it because we have had to go out and get the business that way; and, we have had to do it as a manufactured gas utility with relatively high gas rates. We have, through this program, built up a five and a half million dollar annual appliance business. And we have upgraded the use of gas. . . ."



"Blue Star" —our badge of integrity

● This year marks an important anniversary of the Laboratories Approval Seal of American Gas Association. For the past 25 years the familiar "circle and blue star" emblem has been the symbol of the A. G. A. Approval Plan, adopted to help safeguard the operation of gas appliances and assure their satisfactory performance.

How well are you acquainted with the Approval Seal and its significance? Test your knowledge on these questions:

(1) What basic considerations form the foundation for all A. G. A. gas appliance requirements?

Safety is the primary consideration. Also important are substantial and durable construction.

(2) Is approval of a gas appliance a guarantee of its safety and satisfactory operation in service?

Yes, if the appliance is properly operated and installed. A. G. A. approval signifies compliance with basic concepts of safety, construction and performance.

(3) How are leading gas appliances checked for compliance with national safety, performance and construction requirements?

By actual test at A. G. A. Laboratories in Cleveland or Los Angeles.

(4) Is each individual gas appliance tested at the Laboratories?

No. Manufacturers submit a sample production model of each type and kind of appliance for test and approval. Every approved model manufactured must be constructed in exact conformity with its counterpart that was originally approved.

(5) How can an A. G. A.-approved appliance be identified?

By mandatory display of the Laboratories Approval Seal, registered in U. S. Patent Office by American Gas Association. Every approved gas appliance is required to carry this seal in permanent and readily legible form.

(6) For how long a term is A, G. A. approval granted?

For the balance of the calendar year. For the following five years approval can be retained by means of satisfactory annual inspections at the factory. For further approval after that time, retest at A. G. A. Laboratories under the latest requirements is mandatory.

(7) Is there a check on factory production?

Yes. Laboratories inspectors call constantly at manufacturers' premises, traveling an estimated 150,000 miles a year. In addition to annual inspections, unannounced visits are made to factories. (See A. G. A. MONTHLY, p. 12, June 1950.)

(8) How can I find out which A. G. A.-approved appliances are available?

All approved models are listed in a Directory of Approved Gas Appliances and Listed Accessories. This is published by A. G. A. Laboratories in January and July with supplements for the intervening months.

(9) Who formulates the gas appliance to-

Preparation of requirements sponsored by the Association is supervised by the A. G. A. Approval Requirements Committee. Final approval of all requirements is granted by this committee.

(10) What is meant by "American Standard Approval Requirements?"

Association-sponsored requirements are submitted to American Standards Association, Inc., for adoption as American Standard. The Approval Requirements Committee is a Sectional Committee of ASA and conducts its program in accordance with ASA procedures.

(11) Do groups outside the gas industry have a say in the formulation of gas appliance requirements?

Yes. In addition to utility and manufacturer representatives, the A.G.A. Approval Requirements Committee includes representatives of various government agencies, trade organizations and consumer groups, all closely concerned with current practices and future trends.

(12) How many different sets of gas appliance requirements are there?

There are 15 sets of approval requirements for complete appliances; 14 listing requirements for accessories such as automatic pilot, valves and thermostats; and three installation requirements.

(13) How often are requirements revised:

On the average each set is revised approximately every two years.

New Texas-Illinois gas pipeline starts construction

TEXAS Illinois Natural Gas Pipeline Company has been granted permission by the Federal Power Commission to construct a natural gas pipeline from the Gulf Coast area of Texas to Joliet, Illinois. Work on the new project will get under way immediately, it was announced June 14 by James F. Oates, Jr., chairman of the board of Texas Illinois, an affiliate of The Peoples Gas Light and Coke Company, of which Mr. Oates is chairman. Texas Illinois will operate the new pipeline which, when completed, will be more than 1,300 miles in length.

The current estimate on the cost of the line is approximately \$117,000,000. Mr. Oates said that present plans call for the completion of this third pipeline to the Chicago area by the 1951-1952 heating season.

It has been estimated by engineers of Texas

Illinois that the initial daily delivery capacity of the new gas transmission system will be 305,000,000 cubic feet of natural gas. The line will be 30 inches in diameter and is expected to be initially powered by three compressor stations to be erected at equal intervals along its route. These stations will each generate 8,000 horsepower when in operation, or a combined total of 24,000 horsepower.

The capacity of the new pipeline, Mr. Oates stated, can be increased to 517,800,000 cubic feet per day, and it is planned to reach this capacity ultimately. He said before this top capacity can be realized, Texas Illinois must first acquire more gas reserves and construct additional compressor stations.

The southernmost tip of the line will originate in what is known as the La Gloria gas field which is located about 250 miles southwest of Houston, Texas. Other sources of gas will be from the Blucher and Tijeria fields, adjacent to and just north of the Li Gloria field, and the Old Ocean and Chocolar Bayou fields, situated about 60 miles southad Houston.

The project will be carried out under the direction of the experienced management of Natural Gas Pipeline Company of Americanother of Peoples Gas affiliates, which operates the present 900-mile dual pipeline speem extending from the Texas Panhandle in the Chicago area. Peoples Gas has been receiving natural gas from this system for the past twenty years and will continue to asso. The added supply from the new Tem Illinois line will help meet the demands for gas in Chicago and other communities servel by customer companies of Natural Gas Pipeline Company of America.

How to improve systems and methods work to cut office costs

Program for cost reduction

A JOINT REPORT

By A.G.A.—E.E.I. Subcommittee On Cost Reduction Through Systems and Methods Work

The committee's completed review of the various cost reduction programs effected by several operating utilities indicate that the entire utility industry has been very cost-minded in the postwar period and is specifically cost-minded for the year 1950. Generally, the approach to cost reduction is improved budget control. Specific emphasis has been placed on approving only a minimum budget and establishing controls to hold the line as far as the budget is concerned.

Construction costs today are considerably out of line with construction costs in previous periods. Therefore, financial budgets are receiving specific attention. As a result, a more careful review is being made of the technological improvements and of more efficient methods. The high cost of materials, equipment, and labor make it imperative for the industry to obtain greater efficiency in the utilization of these high cost units.

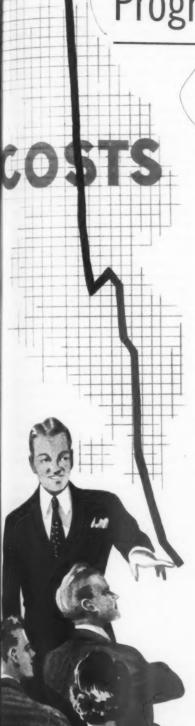
Operating costs in the plants and in the offices are receiving a more careful review than ever before. It is believed that the operating area is a profitable one for cost reduction. We believe that operating costs are divided into two basic categories: (1) the physical operation of the plant and facilities, and (2) the necessary operations required for record keeping, accounting, and compliance with many requirements of various regulatory bodies. The committee is more qualified to review and make recommendations for item (2), therefore, a review of item (1) is omitted from this article.

The review disclosed that various approaches are being used to effect cost reduction programs. Items of costs are being given more careful review in the preparation of budgets. Methods and systems improvement programs are being more systematically approached on a departmental as well as on a companywide basis. Many utilities either have effected or reviewed the possibilities of increased mechanization of office work, bi-monthly and quarterly customer billing, mark sensing for meter reading, tabulating card billing, and post card billing. All of these effectively reduce the costs of operation. Work simplification programs are being developed to improve the skills of supervisors and to develop a more acceptable attitude to cost reduction.

Budgets—The procedure of budgeting operating expenses has been used for many years. Good budgeting on the part of management represents good planning. Good planning is determining in advance of a given period the requirements for that period. Budget requirements should be determined only after a careful examination of the operating practices to determine if less costly methods or practices can be effected. However, any organization to be effective and efficient not only must practice good planning but must also see to it that the plans are carried out.

Establish the goal

Cost reduction may be incorporated in the original preparation of the budget to establish the goal, but, once it is prepared it usually becomes a tool for cost control. The basic interest for the following year or the period of the budget is to check or compare periodically to determine if the current spending is less than, equal to, or more than the estimate. Frequently, this year's budget is last year's expenses plus an allowance for this year's expenses plus an allowance for this year's anticipated increases in labor cost and material cost. Sometimes it is not too difficult to live within a budget since a whole year is available to achieve that result.



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Non-Financial Incentives-In recent years many business firms have approached the problem of cost reduction on the basis that the employee, to be more effective, should have detailed information as to operating cost and work performance of their unit. This is primarily a psychological approach directed at the universal human interest to better one's score. It has been proven that simply by providing employees with rather detailed information as to what they are accomplishing and how much it is costing amazing production increases and related cost reduction were achieved. There are almost unlimited possibilities for extending this method to all types of work and for reaching down into all levels of employment.

Specific approaches

Responsibility—To reduce effectively the cost of record keeping, accounting, and compliance with the requirements of the various regulatory bodies, it is imperative that efficient methods and systems be developed. These methods and systems frequently must be reviewed, analyzed, and revised. This procedure is not a one-time shot in the arm, but must be on a continuing basis. Management, to make this procedure effective, has developed method units within departments, method units as a staff on a companywide basis, and work simplification programs.

To carry out effectively a cost reduction program, the question always arises as to jurisdiction and responsibility. The comptroller or other accounting officer has a primary responsibility, the preparation of all financial reports and statements to the management, stockholders, public, and regulatory bodies. He, therefore, is responsible for the accuracy of all underlying records or paper work.

Pay roll and material tickets prepared on the street or in the plant, applications for service and customers' requests, work tickets for installation of service, and the results of credit action are all underlying sources of information which may be reflected in the final financial reports. Therefore, the accounting officer has a basic responsibility for the development of economical and simplified methods and systems throughout the entire organization where paper work is performed.

Departmental control—An effective cost reduction program can be carried out on a departmental basis. Each depart-

ment head, as a part of management, has the responsibility to hold the departmental operating costs to a minimum. The department head to carry out effectively his assignment must plan the work, analyze the jobs under his jurisdiction, measure the work load, and establish performance standards.

However, it must be recognized that a department may effect the most efficient methods and systems for its operations without effecting the most efficient methods and systems from an over-all company viewpoint. Many times the reduction of effort or the elimination of an operation in one department requires additional effort or additional operations in another department. As a result, there is duplication of effort and overlapping of operations between departments, misunderstandings between departments, and general inefficiency throughout the company. A department may, by the use of its own methods engineer or by the use of the work simplification device, effectively carry out a cost reduction program on all operations performed in the department that do not affect other depart-

Staff Unit Control—There is general acceptance today on the part of management as to the desirability of establishing a methods and systems staff unit to function on a companywide basis. The more important advantages of establishing are:

(1) The staff can devote full time to the problems, develop skills not normally expected of the supervisory force, and apply the full time and the skills in an appropriate manner to assist all levels of management in working out their problems.

(2) Complete investigations and surveys can be made in all departments of the procedures in effect, the various clerical operations performed, the various forms used, the office machines used, and the types of controls established for the proper protection of company assets.

(3) From the information obtained through the investigation or survey, companywide economy, simplification, and standardization can be effected by: redesigning of forms used, elimination of obsolete forms, consolidation of forms, elimination of duplicate, overlapping, and unnecessary operations performed in departments or between departments, installation of new and improved office machines, and simplification of methods for handling large volume repetitive operations.

(4) The responsibility of each department can be more clearly defined which minimizes overlapping of authority between departments with the attendant misunderstandings and disputes. The bulk of minor repetitive decisions by management are eliminated. Morale and team work are improved by elimination of petty bickering through the complete knowledge of tasks of other departments.

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(5) Standard layouts can be prepared of the existing and of the recommended method, system, or equipment. Compansons of the two methods can be formally introduced by pointing out the major advantages and disadvantages. The conclusion reached represents the solution agreed to by all interested parties.

(6) The final method or system incorporates the careful study and thoughts of all departments concerned. It represents the agreement reached by the many department heads as to the most efficient practices and procedures to be effected.

Work simplification—Many industrial firms as well as utilities have installed or considered installing what is formally known as "work simplification" programs. Work simplification seems to be a mystery to most of us. The term sounds good and frequently has been handled loosely. Many questions arise. What is work simplification? Where can it be applied? When should it be used? Who can use it? How do you apply it? Why is it necessary?

Apply common sense

Work simplification is the underlying philosophy of all efforts directed to efficient planning, scheduling, and performance of a job. It is a result of a program which teaches us to apply common sense systematically for the purpose of effectively utilizing our time and talents to the greatest advantage.

The basic aim is to teach the supervisory force and eventually all employees of an organization to think and act constructively by questioning and analyzing the need for and the methods of doing office and clerical operations. It is an organized or systematic plan designed to reduce effort, time, and expense and to eliminate, simplify, combine, and improve office operations. Work simplification should be the basic training for any level of supervision.

Technical problems in a work simplification program generally are not difficult to solve. The greatest obstacle comes from the mental attitude of the people doing the work who feel they are already using the best possible method.

A work simplification program to be effective must be sold to the supervisory force in such a manner as to convince them that it will increase production, obmin lower unit costs, reduce the amount of fatigue on the job, give better service to the customers, and build greater team work in the organization to the advantage of all and without discredit to any individual. It is recognized that it is difficult to assemble a group of people and get them to agree on any one thing. Therefore, management has to sell the idea to the supervisory force.

Best way to sell the program is to first sell yourself, sell top management, then with the assistance of top management, sell the supervisors and let the supervisors sell the workers. It is imperative that the cooperation of the supervisory force be obtained or the program is

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The committee has carefully reviewed the underlying principles of work simplification and believe that utilities not using work simplification should carefully review the advantages to be gained by introducing the subject to their supervisory forces. We believe that the supervisory force should be schooled in the techniques used in work simplification so they will have an appreciation of the problem and thereby develop cost reduction mindedness.

We, therefore, present in a brief and concise form an outline of the entire program. Literature on or diagram forms of the various tools used will not be a part of this report since they may be obtained from the U.S. Bureau of the Budget or from office supply and equipment firms. After reviewing this material it may seem desirable to develop your own forms.

Step One in work simplification is an analysis of the work distribution in any given unit of a company. However, before you can analyze a unit you must be able to see clearly in one place all of the activities of that unit and the contribution of each employee to each activity. The work distribution chart appears to be the easiest and best way to arrange this data in a simple manner. Preparing a work distribution chart usually is accomplished in three steps:

(1) Task list-It does not make any difference who actually fills out the task list, whether it is the employee or the supervisor. The important thing is to get it prepared. The task list sets forth the number of tasks performed by an employee, the duties under each task, and the number of hours per week worked on

(2) Activity list-This is a statement of the various activities carried out in a given unit. If a supervisor asks the question, "What are the jobs that are performed in my department?" he will obtain the answer that represents the activity list. This list does not need to be too detailed and should only represent general activities.

Work distribution chart-This chart need not be a printed form. It is just as well to use a blank sheet of paper ruled in such a manner as to set forth the activities and the number of hours each employee spends on each activity, broken down by the tasks performed by each em-

The work distribution chart is a method of arranging facts about work in the unit in a clear and understandable manner. It is the basis for asking questions. However, it may not assist in obtaining the answer. The basic questions that should arise from reviewing the chart

(a) What activities take the most time? How much time is spent on each; what is the contribution of each employee?

(b) Is there any misdirected effort? Is the unit spending too much time on relatively unimportant activities or unnecessary work?

(c) Are skills being used properly? Is everyone doing the thing he can do best, or are special skills and abilities wasted?

(d) Are the employees doing too many unrelated tasks? Too many unrelated tasks frequently increase office errors; by giving employees unrelated tasks is ef-

Elements in a cost reduction program

- (1) Good budgeting procedure provides a basis for planning and an excellent means of follow up to determine the effectiveness of the program.
- (2) Constant alertness to the possibilities involved in changes such as bi-monthly billing, etc., which may lead to major items in cost reduction.
- (3) Tap the resourcefulness and imagination of the work force by keeping constantly before them the "score" of their accomplishments and costs. Promote their interest in achieving a better "score."
- (4) Establish, on a companywide basis, a methods and systems staff unit which can devote full time to developing the required skills to effectively analyze existing methods and systems and develop new methods that will be most economical from a companywide viewpoint.
- (5) The accounting officer, since all paper work, accounting, and report preparation is his primary responsibility, should have under his jurisdiction the methods and systems staff unit and the authority for utilizing such staff to carry out a cost reduction program.
- (6) Installation of an effective work simplification program which should be a tool for the supervisory organization, with the assistance of the trained staff organization, to develop numerous small but collectively significant items of cost reduction.
- (7) School the supervisors in the techniques of work simplification so they will have a knowledge of a systematic approach to effective planning, scheduling, employee performance standards, and evaluation of the jobs under their direction.
- (8) Sell the supervisors on the idea that they are an integral part of the program, that their future and security is better protected by effectively carrying out a cost reduction program, and that without their wholehearted cooperation the program
- (9) Recognize that a supervisor generally will not have the time and may not have the interest in performing all of the skilled operations required in carrying out a work simplification program. It is not feasible to train these supervisors to become methods analysts, therefore, the staff unit should be organized to assist the supervisory force in working out their problems and carrying out the program effectively.

ficiency and enthusiasm hampered?

(e) Are the tasks spread too thinly? Is there interruption, inconsistency, and changeover time because too many employees are doing the same task?

(f) Is the work distributed evenly? Is there too great a work load on one employee and not enough on another?

If a supervisor carefully reviews the aforementioned chart and attempts to obtain answers to the six questions, he will develop "hunches" about possible improvements and develop "clues" for further study. He will spot the major problems that require more careful analysis. This analysis is usually made by the use of a process chart.

Step two in work simplification is an analysis of the whole work process of the major problem under review. This chart develops the "who," "how," and "when" of the whole work process and permits the analyst to ask "why" about every step. It is only by asking what is the purpose of every step that you find ways of simplifying procedure, get rid of bottlenecks in a unit, and smooth out rough spots.

Four basic actions

To assist a supervisor in seeing at a glance what steps are taking place during a work process, sign language is used. There are symbols for four basic actions, namely, "storage," "transportation," "inspection," and "operation." This operation to majority of supervisors may be considered complex and difficult to perform.

To prepare a process chart, it is necessary to (1) decide on the activity to be charted, (2) determine the starting point and the ending point, (3) identify each step by numbering it, (4) describe each step even though it may be minor, (5) enter time for storage and distance in feet for transportation, and (6) obtain a total of each of the operations, number of feet travelled, and amount of time in storage.

The analysis of a process chart is intended to develop ways to eliminate, combine, rearrange, and simplify steps in the operation. Therefore, a questioning attitude is to be developed in an attempt to determine (1) what is done, (2) why is the step necessary, (3) where should this step be done, (4) when should this step be done, (5) who should do the job, and (6) how is the job being done. If the process chart is subjected to these questions, the answers obtained should result in an improvement.

Ideas for improvements are developed from an analysis of the process chart. The improvements can be diagramed on another process chart so as to set forth the complete operation after new methods have been applied. However, the new method should not be applied until it has been measured by the work load.

Proper sequence

Step three in work simplification is an analysis showing how much is done, which will assist in scheduling the work of a unit. Counting or measuring work supplies the facts that will aid in the improvement of office procedure, adjustment of work assignments, smoothing out work loads, and getting rid of bottlenecks. It shows at a glance where unequal work loads are and quickly spots problems for further study. A work count assists in scheduling work.

In order to balance the work load, it is necessary to know how much is being done. It is then merely a matter of looking at the individual steps in a process and determining if they are in proper sequence with the other steps. The work count can assist with at least seven possible problems in a unit, namely:

(1) To schedule work: Every step in a process does not require the same amount of time, effort, and skill. By making a work count, you can determine how long each step takes in relation to other steps.

(2) To relate tasks: When the work distribution chart shows several employees with unrelated tasks, the tasks should be analyzed and identified with a work count. It may be possible to combine the tasks into one job relieving one of the employees.

(3) To measure the value of a step: Sometimes equal time and manpower are spent on a step which is relatively unimportant or which produces few results.

(4) To divide work: Sometimes a procedure may be applied to all work when such procedure is only necessary for part of the work.

(5) To spot bottlenecks: Counting the number of units passing a given point and counting the backlog piled up on a desk, may disclose areas classified as bottlenecks.

(6) To demonstrate personnel needs: A work count assists in backing up personnel estimates with facts and figures when an increased work volume may develop backlogs and bottlenecks.

(7) To stimulate interest: A work count which shows the accomplishments of a given unit in relation to other units engaged in similar work, frequently arouses interest among the employees

Here is an example of a case that would have been, and in certain areas probably still is, a natural case for either a work process chart of work simplification or a companywide staff unit. We submit the story so that you too can appreciate the need for determining the number of operations, the mileage travelled, and the duplication of effort.

The "A" electric company in the thirties was faced with the task of constructing over the next decade or two, hundreds of miles of rural line to reach farms in the company's service area. The most economical way of extending this service in this volume was determined to be by following specially qualified units:

(1) A solicitor would contact prospective customers and secure a service agreement setting out the minimum monthly charge to be paid.

(2) A right of way engineer would obtain the necessary rights of way.

(3) An electrical engineer would do the preliminary engineering.

(4) A civil engineer would stake out the extension.

(5) An independent contractor would build the extension.

(6) A small company line crew would energize the line and test transformers.

(7) Meters would be set by company service crews.

(8) Extensions would be inventoried by company continuing property record personnel.

With the passage of the years, the "A" company's rural construction program reached the point where necessarily all of the remaining extensions were but short branches from the existing lines and were at the greatest distance from company headquarters. Customer density had been growing steadily less.

Obviously the change in conditions now makes it necessary for "A" company to greatly reduce the number of units that go out to make these small scattered extensions. The work of the solicitor and right of way man was consolidated. The engineering was also consolidated, and all of the construction work done by company crews. This resulted in only three units going out on an extension instead of the previous eight. Furthermore, it may be possible to have the engineering crew obtain the service agreement and right of way so that only two units, engineering and construction, become necessary to complete future rural extensions.

22 manufacturers participate in A.G.A. Combined Commercial Gas Exhibit

Gas exhibit "stops the show"

Dy spanning the Navy Pier at Chicago, the Section's Combined Commercial Gas Exhibit at the National Restaurant Association Exposition literally "stopped the show." The dramatic gas exhibit was situated about 1,000 feet down the milelong pier so that those visitors who wished to see more than 25 percent of the exhibits had to pass through the gas area both coming and going.

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Covering more than 4,000 square feet, 22 manufacturers of heavy duty gas cooking equipment cooperated with A. G. A. in making this the most successful restaurant show ever held. Exhibitor after exhibitor stated that they had sold more equipment and found more new prospects than at any previous exposition.

More than 20,000 visitors crowded the vast Navy Pier during the week of May 22—among them were some 30 commercial gas men from distant points such as Dallas, Texas; Savannah and Atlanta, Ga., and Tulsa, Oklahoma. Many of the gas men were in Chicago to attend a meeting of the A. G. A. Food Service

Equipment Committee as well as to visit the restaurant show.

Among the new pieces of equipment shown in the gas area was a counter model deep fat fryer by Anetsberger Bros., Northbrook, Ill., that matches that company's counter griddle and hot plate. Production of this new fryer in addition to their hot plate and griddle gives the gas industry a matched line of equipment that has not been available in the past.

Another new appliance was shown by Sellers Engineering Co., Chicago, a "yellow jacket" water heater. This appliance is a large volume instantaneous heater for commercial establishments and has the feature of delivering two-temperature water. It is made in four sizes ranging from 240,000 to 720,000 Btu input.

Lansing Manufacturing Co., Cleveland, had a new L.O. dishwasher of the immersion type with a self-contained gas heater and automatic temperature control.

Detroit-Michigan Stove Company showed an interesting new "Dinette Range." This small compact unit provides for all the conventional cooking operations with four open burners, a griddle, broiler, thermostatically controlled oven. It has a storage space and has been designed for the very small restaurant or large home. The range is available in both black and stainless steel.

Other cooperating exhibitors showing their latest models were: American Stove Co., St. Louis, Mo.; The G. S. Blodgett Co., Inc., Burlington, Vt.; The Cleveland Range Co., Cleveland, Ohio; Duke Manufacturing Co., St. Louis, Mo.; Gas Consumers Association and Groen Mfg. Co., Chicago, Ill.; Hubbert & Son, Inc., Baltimore, Md.; Kewanee Industrial Washer Corp., Kewanee, Ill.; Lyons-Alpha Products Co. Inc., New York, N. Y.: The Malleable Steel Range Mfg. Co., South Bend, Ind.; Market Forge Co., Everett, Mass.; National Cornice Works, Los Angeles, Calif.; Royce L. Parker, Inc., Addison, Ill.; J. C. Pitman & Sons Sales Corp., Lynn, Mass.; Robertshaw-Fulton Controls Co., Youngwood, Pa.; Ruud Mfg. Co., Pittsburgh, Pa.;



American Gas Association lounge at National Restaurant Exposition featured education panels on gas expansion

Gas company visitors to the A. G. A. lounge included: (Left to right) Ray G. Juergens, Cleveland; R. S. Chapman, Atlanta, Ga.; F. X. Mettenet and J. J. Condon, Chicago, and William Green, Detroit



ISSUE OF JULY-AUGUST, 1950



▲ A portion of the Combined Commercial Gas Exhibit where 22 manufacturers showed their latest equipment during the National Restaurant Exposition



A continuous stream of visitors crowding booths of the Combined Commercial Gas Exhibit. Many exhibitors sold more equipment than at any previous show



▲ Food Service Equipment Committee: (Seated) Paul Inskeep, Ray G. Juergens, E. V. Fineran, chairman; E. J. Horton, J. T. Heilig; (standing) L. E. Clancy, M. H. Douglas, L. L. Peters, E. S. Finnegan, P. C. Grimes, J. J. Condon, J. J. Bourke, R. E. Regan, J. V. Hall, R. S. Chapman, Joe Gabris, Elmer Lerch, M. A. Combs, E. J. Mayland, J. M. Johnson

Savory Equipment, Inc., Newark, N. J., and Vulcan-Hart Mfg. Co., New York, New York.

The exact center of the gas exhibit contained the A. G. A. Lounge which was filled to capacity at all times with visiting gas men, overflow from exhibitors' booths and others interested in volume cooking with gas.

So many manufacturers of gas equipment participated at the show that it was impossible for them all to be in the Combined Exhibit. Among those in other locations was The American Nameplate Manufacturing Co., Chicago, showing an automatic coffee urn which measures the quantity of thermostatically controlled water that is poured over a controlled quantity of coffee. The water tank fills automatically and the human element is removed even to a timer which will start the urn early in the morning and have coffee ready when the concern opens.

Aluminum Cooking Utensil Co., New Kensington, Pa., had a self-contained gasfired stock kettle. Southern Equipment Co., St. Louis, displayed their new Secomatic Convertible gas-fired dry heat and/or wet bath food table. The Middleby-Marshall Oven Co., Chicago, displayed their new revolving tray oven in cut down size to meet the needs of the hotel or restaurant. It is only 80½" wide x 36" deep by 72" high. MagiKitch'n Equipment Corp., demonstrated their broiler-griddles.

One of the features of every restaurant show is the announcement of winners of *Institutions* Magazine's contest winners. This year gas had three out of five grand award winners and gas kitchens were in 32 of the 44 operations that were awarded honors of some kind.

Furnace installations_

(Continued from page 26)

also determined and in no case permitted to exceed permissible limits.

Requirements for confined space units do not officially go into effect until January 1, 1951. However, at the request of manufacturers who are interested in having approved units ready for the next heating season, A. G. A. Laboratories are now testing under these new requirements. All units obtaining approval will be listed in an early edition of the Directory of Approved Gas Appliances and Listed Accessories, published by the Laboratories. This directory is issued in complete form each January and July with supplements for the intervening months.

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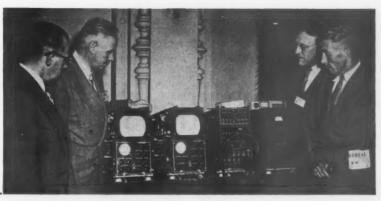
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▲ Television control and monitoring equipment used at the meeting is inspected by: F. C. Utterback, A. Q. Smith, A. G. A.; Clarence W. Goris, and R. W. Millard



▲ Television demonstration was a highlight of Midwest Council meeting. Cameras scanned the audience while speaker discussed use of gas in tube manufacture

An enthusiastic group of nearly 150 industrial gas men attended the two-day spring meeting of the Midwest Industrial Gas Council in Gary, Ind., May 25 and 26. It was particularly fitting for the council to select Gary, as that city is the home of the world's largest steel mill, Carnegie Illinois Steel Co., one of the larger plants of the National Tube Company and a model school system.

This particular meeting was held under the sponsorship of Northern Indiana Public Service Company and the address of welcome was given by the superintendent of the Gary division, Clarence W. Goris. R. W. Millard, Michigan Consolidated Gas Co., presided and introduced the first speaker, H. Pelphry, research engineer, Michigan Tool Co., Detroit. Mr. Pelphry's paper included slides and diagrams on hot and cold treatment of high speed steel. His major points covered metal treating at high temperatures and sub-zero temperatures.

Stewart Parker of the industrial department, The Peoples Gas Light & Coke Co., Chicago, gave excerpts from his paper on induction melting versus gas melting for non-ferrous metals. This was part of an Information Letter Mr. Parker is preparing on the sub-

ject for the A. G. A. Industrial and Commercial Gas Section, to be sent out to the Section membership.

Most of the afternoon session of the first day was devoted to a demonstration of television by M. Goldstein, research engineer, American Television Institute, Chicago. Coming to Gary with a large mobile unit, six men and about \$50,000 worth of equipment, Mr. Goldstein discussed the past, present, and future of television. All during the talk the cameras scanned the audience and from time

to time picked up certain objects or people to illustrate the speaker's points. Part of the talk was devoted to manufacture of the receiving tubes during which gas is used for many of the glass forming and sealing operations.

The first day's session closed with a talk by G. E. Marble, industrial sales department, Michigan Consolidated Gas Co., on steam boilers as a potential market for gas load. The second day was given over to plant visitations around Gary.

Industrial & Commercial events to come

TWO IMPORTANT national expositions and two traditional breakfasts are on the program of Industrial and Commercial Gas Section, American Gas Association.

First will be the National Metal Congress and Exposition during the week of October 23 in the National Amphitheater, Chicago. On Wednesday, October 25, the now famous A. G. A. Industrial Gas Breakfast will be held in

the Palmer House. Industrial gas men attending the Metal Show always plan to attend this popular affair. A wellknown speaker has been selected for the occasion.

Another important event is the National Hotel Exposition at Grand Central Palace, New York, the week of November 6. During that week the third annual A. G. A. Commercial Gas Breakfast will be held in the Hotel Roosevelt.

This affair has been growing in popularity each year and a capacity audience of commercial gas men is anticipated to hear the speaker.

At both of these national expositions the Industrial & Commercial Gas Section will sponsor a large combined exhibit which in both instances will be the largest single exhibit in each show. Both the displays will be PAR Plan activities.

Distribution and motor vehicles groups outline subcommittee activities

Operations and the road ahead

Educate the driver

By E. W. JAHN

Chairman, A. G. A. Subcommittee on Safety and Safe Practices

Motor vehicles roll on street and highway in ever-increasing numbers. In 1896, there were but four automobiles in the United States; today, there are over 42 million—seven million more than were in use in 1941, the year before the war.

As the number of vehicles has increased, so has the number of accidents that cause injury and death with its attendant grief, misery and economic loss. In 1949, some 31,800 persons were killed and 1,564,000 injured. Why should this be, with the great strides that have been made in the safety of the automobile itself and the evident improvement in streets and highways? There is only one answer—the driver.

Statistics and studies of many national associations interested in reducing our terrific accident toll point straight at the driver, in his acts of commission or omission, as the guilty party. He is responsible for over 85 percent of all accidents. The answer to this problem, in the opinion of these associations, is more driver education.

American Gas Association has recognized this problem and works toward its solution through the Safety and Safe Practices Subcommittee of its Motor Vehicle Committee. In 1949, this committee prepared a paper entitled "Methods of Improving Safe Handling of Motor Vehicles." This paper tried to outline what is needed in a well-balanced drivers' training program. It was presented at the 1949 meeting of the Ameri-



E. W. Jahn (above), Consolidated Gas Electric Light & Power Co. of Baltimore, discusses work on defensive driving

can Gas Association, and several hundred copies have been distributed.

Most of the data to be taught drivers, as outlined in this paper, is available in books and pamphlets published by companies and associations interested in lowering the number of accidents. However, there are rules and regulations and other data particularly applicable to each fleet. These could be included profitably in a company manual.

As members of A. G. A. have many problems in common, it has been decided to have a basic company manual prepared for the Association's members. The Subcommittee on Safety and Safe Practices has undertaken to develop this manual. The thought is that each company can adopt the manual for individual use by inserting special company regulations, instructions, preparation of forms and other data peculiar to that company.

Plans call for the manual to contain rules and regulations governing the limitations, proper use and correct handling of automotive equipment. Feeling that "one picture is worth a thousand words," the committee hopes to develop a manual which is interesting as well as educational. It will be illustrated profusely with sketches, pictures and charts, keeping actual reading matter to a minimum.

We shall borrow liberally from similar manuals which have been issued by public utilities and by large fleet operators such as over-the-road operators, gasoline and oil distributors and other types of companies. "Defensive driving," which involves attention, foresight and an alert sense of responsibility and courtesy, is the theme of the text. The manual is to be brief on the basic elements of safe driving practices but designed to make the operator conscious of the many problems he will encounter. Driving without accident and caring for equipment will be stressed as a matter of personal pride.

Those practices contained in the manual will be offered in the light of experience. Our objective is to encourage each driver to assume a sense of responsibility for the safe and economical operation of the vehicle he drives.

Preparation of the manual will involve a considerable amount of detail work on the part of the committee members. However, they expect to complete their assignment at an early date.

> Meters group covers a broad field

By G. K. BACHMANN

Chairman, A. G. A. Subcommittee on Meters and Metering

If someone were to ask what the Subcommittee on Meters and Metering is doing these days it would require a pretty lengthy answer. This committee has for its membership meter men representing gas companies from coast-to-coast and border-to-border as well as a representative of the National Bureau of Standards.

At the present time there is a great deal of interest in metering due to the fact that increasing numbers of comnanies are changing over from manufactured to natural or mixed gas. One of the main objectives of the meter committee is to act as a clearinghouse for changeover problems and also to keep the industry informed of the latest developments in the field of metering.

Because of the system under which this committee functions it is possible to cover a large number of subjects with maximum effectiveness. Each project to be studied is placed under the direction of one individual member of the committee. It then becomes his responsibility to investigate and either report or lead a discussion on the subject at the spring luncheon conference. The possibility of working out some plan whereby we can have printed presentations but keep all discussions "off the record" will be discussed at the organization meetings in New York this fall.

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As is true in so many other phases of the gas business, technological advancement has broadened the field for the meter man and made his job more complex. No longer, for instance, do the larger meter shops depend on slow manual methods for opening tin meters. Both gas-fired and electrical devices are now available that do this job in a matter of

In like manner, meter engineers throughout the industry have utilized their skill and ingenuity to develop better equipment for such operations as testing, meter handling, gassing, degreasing diaphragms, washing, painting, etc., in an effort to combat the effect of higher labor costs and to improve working conditions in their shops. Many such devices were described and illustrated at the recent Distribution Conference in Detroit. It is hoped that they will motivate their own "chain reaction" of ideas.

The Bureau of Standards has cooperated closely with the meter committee on the development of a standard physical setup for the capacity testing of meters. Heretofore variations in such things as the size and location of takeoff taps for differential gauges have resulted in inconsistencies when making tests to determine meter capacities. Work on the 5 lt. size is completed but some further checking is necessary on the larger sizes. As gas meters "just grew" over the years there is much need for standardization. Work of the Bureau's representative is a

valuable contribution in this regard.

The committee also can boast of an excellent reference library—one of this year's projects was to bring up to date a bibliography of articles on meters and metering. This has been done and copies distributed to committee members. Most of the articles catalogued are available at the library in A. G. A. headquarters.

Last year's committee was instrumental in gaining amendment of the government order which restricted the thickness study is a broad one.

Orifice metering is not given the attention it merits in regional meter meetings in the Southwest, etc., but an attempt is made to keep the membership abreast of significant developments. Each year at the distribution conference a comprehensive talk is given by someone familiar with the subject.

It has become the custom each year to have two papers on metering at the general sessions of the Distribution Confer-







Chairman G. K. Bachmann (left), Public Service Electric & Gas Co., and Vice-Chairman G. E. Griffin (right), The Brooklyn Union Gas Co., lead a typical A.G.A. subcommittee whose members represent gas companies from coast-to-coast and National Bureau of Standards

of the coating on tin plate. Prospects for the actual procurement of this heavier plate, however, are not good. The question of tin plate and many other meter materials was investigated by various members of this year's committee and their findings were discussed at the luncheon conference in Detroit. The relative merits of different types of diaphragm materials or valve covers were included in this discussion which even covered a study on the relative merits of tin and iron meters.

Another evidence of how far afield the work of the meter committee has gone is the inclusion on the agenda of such things as demand metering and meter set practices. In studying the latter project, one member of the committee collected over 60 photographs or sketches of meter settings covering indoor and outdoor installations. Obviously this information on what the other fellow is doing will be of great value to anyone who has a meter set problem.

Pressure regulators also come within the province of the meter committee. Inasmuch as requirements vary in various parts of the country from 1,000 pounds inlet to one pound inlet, the field for ence. Printed copies are available of two excellent papers given this year entitled "Testing Installation Performance & Maintenance of Rotary Gas Meters" and "Meter Performance Under an Extended Periodic Change Program."

Space will not permit a complete resumé of all the items which have been covered by the current committee. However, the foregoing will give some idea of their scope and objectives. To help meet our objectives, close cooperation is given by the manufacturers of meters or parts, so that by and large the Subcommittee on Meters and Metering is a fine example of A. G. A. activity at its best.

> Large audience for distribution design

By W. P. DICK

Chairman, A. G. A. Subcommittee on Distribution Design & Development

The 1950 luncheon conferences of A. G. A. Subcommittee on Distribution Design and Development attracted





Chairman W. P. Dick (left), Columbia Engineering Corp., and Vice-Chairman H. G. Howell (right), Memphis Light Gas & Water Division are leading their group in vigorous attacks on major problems in the plant distribution design and development field

one of the largest attendances at the 1950 Detroit Distribution, Motor Vehicles and Corrosion Conference. Luncheon conference attendance exceeded 135 at both afternoon sessions.

At the 1946 spring conference, the first subcommittee in this field, then titled "Subcommittee on Distribution Development" presented the initial program with D. M. Workman, New York, as chairman. The name and scope of this subcommittee changed slightly until the 1948 program was organized with G. E. Hitz, Poughkeepsie, and Calvin A. Brown, Rochester, N. Y., as co-chairmen. At that time, the present name, "Distribution Design and Development," was given to the subcommittee. Judging from the attendance at these luncheon conferences, a large number of gas distribution people are interested in this field.

Major objective of any gas utility is to grow and develop with the community it serves, rendering the best possible service to the most complete range of uses and applications of gas. A surprising number of utilities find their extension and plant improvement expenditures, for all reasonable requirements of growth and increasing capacity demands, alarmingly high. In addition, extensions and improvement project costs, generally have doubled in the last ten years while the gas customer rate per Mcf has remained static.

As a consequence, most gas utilities are attempting to retain their base loads and secure additional attractive revenue without jeopardizing the quality of their gas service or incurring excessive distribution system expenditures. The problem of meeting these requirements and

securing economic solutions usually falls within the scope of plant distribution design and development.

When the subcommittee met in the fall of 1949, the members were anxious to select subjects that would present possible solutions to some of these problems. Since the solution of design problems often hinges upon the accuracy of forecasts or assumption of some unknown factors, the subcommittee was interested in subjects that might offer aid in that field.

Following the selection of favorable subjects, members of the group agreed to conduct an investigation of the various practices of from ten to 35 gas utilities. From these investigations and the discussions conducted at the informal conferences, it was hoped that either helpful conclusions could be reached or that the subject could be continued in future study.

Briefly, this subcommittee has attempted to select subjects covering one of three general fields in distribution design and development: (1) Methods of accumulating and projecting data for use in developing peak plant requirement and determination of plant capacities; (2) examination of the standards, devices and practices used in various gas utilities for possible economy through improved operations and results; (3) policies and practices in use in the industry to promote protection to public life and property and safety to employees.

We feel that a better selection of subjects for development could be made if A. G. A. members would make known their interests and ideas in this field to either the chairman of the subcommittee

or A. Gordon King, secretary of the Operating Section. Generally, there is special interest in those devices, practices, policies or methods in the scope of design that will either (1) effect economy in capital expenditures or operating expense, or (2) improve plant facilities.

Hubert G. Howell, chief engineer of the gas division, Memphis Light Gas and Water Division, Memphis, Tenn., will be chairman of the Distribution Design and Development Subcommittee in 1950-51. Memphis has been selected as the site of the 1951 A. G. A. Distribution, Motor Vehicle and Corrosion Conference.

The Memphis gas distribution system will offer an opportunity to observe the application of extensive telemeter operations and the broad use of remote control of distribution regulators. Mr. Howell hopes to receive suggestions and ideas for development in 1951 in order that his subcommittee efforts will be directed to timely and interesting subjects,

Safety in operation

By G. A. S. COOPER

Chairman, A. G. A. Subcommittee on Safe Practices in Distribution

S afety is closely interwoven with operation. In fact, the relationship is so close that when a boss lays out work for one of his men for a definite assignment, he must provide the tools, materials, assistance and protection to assure that the work will be completed in the shortest time and at the lowest cost.

The "protection" mentioned above is the "safety practice" of operation. Just as a boss may keep posted on the latest methods of gear-cutting and turret lathe improvements (if he happens to be foreman of a machine shop) so must he keep up with the latest safety equipment available for protecting his men. He must also keep well informed on the safe methods of operation.

Practically all gas companies have safety educational departments, accident prevention committees or departments. It is the function of these departments to provide information to all bosses concerning types and sources of protective methods so that it will be just as much a second nature for the boss to see that his man uses the proper protective equipment as it is for him to use the proper

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G. A. S. Cooper (above), Public Service Electric & Gas Co., emphasizes rela-tionship between safety and operation

tools of operation. It is also the function of these departments to provide the posters, educational matters, lecture material and other things required by the boss to impress upon his men that they are responsible for their injuries, caused by employee failure.

At the 1950 Distribution Conference in Detroit, the A. G. A. Subcommittee on Safe Practices presented ten-minute motion picture messages. These messages demonstrated the type of material available which could be used by the boss in safety meetings as warnings to his men on employee failure. At the same time, the messages could be used to encourage the boss when he returned to his shop to look around and check the protective methods he should provide for his men.

Each luncheon conference is dedicated to a definite function. An example is "Meters and Metering" which is dedicated to the design, maintenance, development and handling of meters. At these meetings papers are presented describing some important development in operation such as "mechanical devices for handling in the shop." These papers assist other companies to improve their operations, and at the same time provide an incentive for others to tell of other improvements they have developed. All this is operation.

The chairman of that same committee should also try to find some person who has developed an improved protective device and include it on his program. This will be an incentive to others to do likewise. It is a peculiarity in human nature that many feel eye glasses are an improvement and proudly wear the most decorative ones they can purchase. Yet many people who are hard of hearing feel it is a disgrace to wear a hearing aid. Both are mechanical devices to correct subnormal functions of that particular eye or ear. What is the difference?

For the same reason, protective equipment is just as necessary as good operating equipment to insure uninterrupted completion of the work. Therefore, protective equipment should be developed and presented at the conferences.

The Accident Prevention Committee will assist all who are faced with these problems.

The Subcommittee on Safe Practices recommends that papers (such as Meters and Metering) be presented at these conferences, showing developments in protective devices presented by a member of the particular committee. This should not conflict with the general messages presented by the Subcommittee on Safe Practices, which should give the incentive to search for and develop such protective devices.

It is hoped that the efforts of the Subcommittee on Safe Practices have planted just such an incentive.

Industrial relations round-table

Prepared by A. G. A. Personnel Committee

● Pensions—The Chamber of Commerce of the United States reported in April that more than one million new employees were covered under collectively-bargained pension plans in 1949.

One out of eight contracts being signed currently contains pension plan provisions, the National Chamber estimated. The trend of these collectively-bargained plans is noncontributory with benefits of \$100 per month, including social security payments. These facts, and the extent to which pension and welfare plans have become a part of union collective bargaining are featured in a new study made available by the Chamber's Labor Relations Committee.

Copies of the report may be obtained from Employer-Employee Relations Division, Chamber of Commerce of the United States, Washington, D. C.

• Union contracts include arbitration provisions-A recent study of almost 1,500 current collective bargaining agreements by U.S. Department of Labor's Bureau of Labor Statistics revealed that 83 percent contained clauses providing for some type

of arbitration procedure.

The report, "Arbitration Provisions in Union Agreements in 1949," provides data on the prevalence of arbitration provisions found in collective bargaining agreements, by major industry group. In more than four-fifths of the agreements studied, any grievances arising out of the application or interpretation of the terms of the agreements are specifically included within the scope of arbitration. About one arbitration clause out of every ten permits the arbitrator to decide issues not covered by the agreement, as well as those covered.

Copies of the report may be obtained free from: Regional Office, Bureau of Labor Statistics, 341 Ninth Avenue, New York 1,

 Connecticut Supreme Court of Errors recently affirmed a lower court decision that a foreman's exempt status under the Fair Labor Standards Act as an executive was not destroyed by the fact that he received extra pay on an hourly basis for Saturday and Sunday work. The fact that this Armstrong Rubber Company foreman punched a clock and received extra pay on an hourly basis for Saturday and Sunday work did not persuade Judge Baldwin that the foreman's exempt status should be changed because his work relationships met all of the requirements of the law for executive employees.

Conserving Your Soil—Texas Gas Transmission Corporation offers farmers a new service described in a booklet entitled "Conserving Your Soil," distributed to all farmers whose land is crossed by pipelines of the company.

This booklet includes in two sections, (1) the steps Texas Gas is taking to protect the soil above its right-of-way on farm land, and (2) a brief guide to methods that may be followed independently to conserve land and increase its yield.

Some of the material presented comes under these chapter headings: Work of the Soil Conservation Department-Who Benefits from Soil Conservation?-Erosion and

(Continued on page 64)

Conferees call for sales action

There is a definite need for gas industry action in the sales, sales promotion and public relations fields. This thought was the theme of the New York-New Jersey Regional Gas Sales Conference, sponsored by the Association's Residential Gas Section at Spring Lake, N. J., June 19 and 20, 1950.

George Kelley, sales department, Westchester Lighting Co., chairman of the conference, set the theme in his address of welcome. He briefly reviewed the situation on gas house heating sales in his company's territory, where temporary rate increases for gas house heating had been granted. Mr. Kelley displayed reproductions of advertising and promotional pieces that had been successful in creating sales of gas house heating despite substantial rate increases in this bracket.

D. A. Hulcy, president, Lone Star

Gas Co., Dallas, and vice-president of A. G. A., discussed "Accent on Action." Mr. Hulcy noted that the need for action by the gas industry is likely to be overlooked in the midst of the tremendous over-all growth of the industry. Action in sales is needed to protect and preserve basic markets in the face of the most aggressive and determined competition which has ever faced the industry, he explained.

The advent of natural gas may further increase the feeling of economic security in the industry, Mr. Hulcy said.

He emphasized, however, that complacency would bring a rude awakening. He described examples of aggressive action taken by his own company in an area where natural gas is plentiful and cheap. Despite the fact that use of this fuel for all basic requirements has become almost a habit, competition has be-

come increasingly active, he disclosed.

Edith Ramsay, home equipment editor. The American Home Magazine, focussed the need for action on a single appliance -the gas laundry dryer. Growth of this appliance has been phenomenal. Two hundred were sold in 1946; 106,000 in 1949, and based on figures for the first four months, more than 300,000 should be sold in 1950. Electric dryer sales increased ten percent last year, while sales of gas dryers jumped 66 percent. Nevertheless, electric dryers still account for the majority of sales. Miss Ramsay pointed out many points of superiority that gas utility companies could use in increasing sales of automatic gas dryers.

Home service is a field where much of the spade work in acquainting the housewife with the labor and health saving attributes of the gas dryer can be accomplished. In a joint presentation, home







George Kelley (left), c'aairman, A.G.A. New York-New Jersey Regional Gas Sales Council, discussing gas house heating sales. Mr. Kelley displayed promotional pieces which have spurred gas house heating sales in his company's territory. (Center) Carl V. Haecker, Radio Corp. of America, using sales pointers during talk on the different reasons that people buy. (Right) W. D. Williams, elected incoming chairman of council, addressing Tuesday meeting







I. K. Peck (left), vice-president, The Manufacturers Light & Heat Co., discussing problems in connection with changeover to natural gas (see page 21). R. Louis Towne (center), chairman, sales promotion committee, GAMA Gas Water Heating Division, discussing Court of Flome campaign. B. H. Wittmann (right), The Peoples Gas Light & Coke Co., calling for concerted sales action



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"Accent on Action," talk by D. A. Hulcy (left), president, Lone Star Gas Co., emphasized the need to protect major markets from today's competition. Edith Ramsay (center), The American Home magazine, pointing out the phenomenal growth of the gas laundry dryer. O. J. Hartwig (right), Long Island Home Builders Institute, presenting basic truths for utilities in the new home field

service representatives from The Brooklyn Union Gas Co., Anne Sopensky and Carol O'Connor, told the sales representatives of the work their company is doing in this comparatively new and fast-growing field.

An outstanding demonstration of the results that can be achieved by concerted action in the sales field was given by B. H. Wittmann, manager, domestic sales department, The Peoples Gas Light & Coke Co., Chicago. Lack of organization is the greatest sales obstacle existing today, he declared. Salesmanship is needed in the gas industry to combat our competitor's dollars. Gas refrigeration will outperform any other type of home refrigeration, Mr. Wittmann said, and a firm belief in the superiority of this product will help make sales easier.

Mr. Wittmann briefly described the organization of the sales force in his company that won the Servel national award for gas refrigeration sales last year. He stressed the necessity of field training, for supervisors as well as for

the men on the selling line.

Charles C. Owen, sales promotion manager, Space Heating Division, Surface Combustion Corp., told the delegates they had the finest fuel to sell. Production facilities and natural gas reserves are at their highest level, he said. However, aggressive action is needed in the house heating field, he added, pointing out that 592,000 gas house heating jobs were sold last year, while 571,000 oil customers were added to the house heating list. Recent surveys indicate this trend is growing, although in many areas price differentials favor gas house heating.

W. D. Williams, assistant sales manager, Public Service Electric & Gas Co., Newark, N. J., was elected chairman of the Council and presided at the meeting on Tuesday. Robert N. Laux, Kings County Lighting Co., Brooklyn, was elected vice-chairman, and Hugh L. Wathen, South Jersey Gas Co., Atlantic City, N. J., was elected a director.

Irving K. Peck, vice-president, The Manufacturers Light and Heat Company, Pittsburgh, opened the Tuesday program with an inspiring talk on the problems facing metropolitan and other gas utility companies, awaiting the advent of natural gas. He advocated a strong public relations program to be started immediately by these companies.

Mr. Peck showed that such a program is needed to counteract existing beliefs in the minds of consumers that the advent of natural gas means immediate and drastic reductions in rates. Customers should be informed of the cost of doing business which will be affected only to a small extent. Stories of construction progress should be supplied to the press to keep interest stimulated. Backed by the experience of many years with natural gas companies, Mr. Peck outlined many of the obstacles ahead for gas companies expecting natural gas.

The new home market is vitally important to the gas industry. O. J. Hartwig, executive secretary, Long Island Home Builders Institute, brought home some truths that should have grave mean-





Anne Sopensky (left) and Carol O'Connor, home service representatives from The Brooklyn Union Gas Co., discussing various labor and health saving attributes of the gas laundry dryer

ing to utilities, at least in the New York-New Jersey area. In the five-year period from 1947 through 1951 more than 357,000 home dwellings, costing about \$3.5 billion will be built in this area.

Gas utilities in the prewar days had maintained a stand-off attitude regarding bringing gas mains into new developments by insisting that the builders underwrite a good part of the cost of such extensions. As a result, builders, not having that kind of money, Mr. Hartwig said, had gone timorously at first and then confidently to electricity and other fuels. Today, the gas industry has a hard job ahead to get back the new home market that it once dominated.

R. Louis Towne, sales promotion man-

ager, Rheem Manufacturing Co., and chairman, GAMA Gas Water Heating Division sales promotion committee, was assisted by Stanley Gorman and a bevy of beauties, in demonstrating the colorful action that can be included in the Court of Flame Campaign. He pointed out that the direct selling contacts of gas utilities. whereby representatives can readily secure admission into homes, is the envy of all house-to-house selling organizations. He urged companies to put this asset to work to help restore the former proportion of 80 percent of all automatic water heaters sold to the gas industry, instead of 60 percent majority it now holds.

There are many reasons why people buy, some of them serious and some of them amusing. Carl V. Haecker, Radio Corp. of America, related many of these reasons to an appreciative audience. He charted many of the buying impulses and outlined ways of turning them into sales, all the way from the billboards and national advertising pages down to the last three feet where the consumer, the salesman and the product meet in the contest for the consumer's dollar.

Employee training_

(Continued from page 20)

opportunities our system provides.

When we discussed "who profits from profits," we found that we all are ahead, first as customers, for the better products—second as employees, for more and better jobs—and third as savers or owners, from a wage on our savings. Profits mean progress for everyone.

The third session, which is as far as we have gone to date, took up the natural sequence to the first two. How did we get this way? How does man get ahead? Again we went back to basic fundamentals—man wants something—expends energy to secure it from some kind of raw material—builds tools to make his human energy more effective.

Employee discussion during the third session resulted in agreement that better tools must be made and invented to keep the American system progressing.

The first really big step ahead, our employees learned, was when man invented tools run by heat instead of human energy. Americans, because they were free from excessive interferences, welcomed new tools, whether or not they invented them. They developed and enlarged them, made them work. The basic

urges could be satisfied because men were free. In fact, the Constitution was amended almost before the ink was dry to prohibit the government from infringing on its citizens' freedom. The Bill of Rights reads more like a bill of prohibitions. This freedom led to invention until today 94 percent of all work is done by machines.

Heat instead of muscle—human energy multiplied by gas—by electricity, by oil—coal. More machines—more income—shorter hours—lower prices—higher wages—more jobs. Americans are free to make more stuff. Because of tools we have more, and because we are free to spend or save, we have more tools. Savings make tools possible—savings make jobs. Jobs require savings from \$5,000 in some industries to \$60,000 in the utility industry.

But now the Plague appears to be developing again—government is killing the free choice of spending. Ever-increasing taxes narrow this choice.

This then is the challenge of the future: Shall we remain free to save or spend—free to fail as well as to succeed—free to meet the demands of a greater population, make more jobs, have a greater output, higher real incomes, bet-

ter homes, better and more food, shorter hours, greater opportunities? It was agreed that if we wish to remain free to gain all this, we must help ourselves and our country

 By getting all the understanding we can of the American way of making and distributing goods.

(2) By learning the part played by individual freedom, initiative, inventiveness, labor, savings and management, research and machines.

(3) By telling friends and neighbors how the American system works. We must talk up the good things—keep after and get rid of the bad ones.

(4) By taking an active part in all civic affairs. We must get acquainted with the people who run the schools, city, county and state and federal governments. We must tell them what we think.

Later on, the company will go further into this fascinating question of the American economic system. Now we are busy discussing the facts we have learned. We know what makes our system tick. We know the danger of the Plague. With knowledge and the will to remain free, we can help to cure the Plague.

Industry news

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Consolidated Edison opens safety drive

CONCERNED over the safety of its field employees who are exposed to mounting hazards from the increased traffic in its growing service area, Consolidated Edison Co. of New York, Inc., recently initiated a planned work area protection program.

This program is the result of a detailed study of all phases of work area protection made by the system's street protection committee under the guidance of Arthur W. Wallander, assistant to the president of Consolidated Edison and former police commissioner of New York City. Although individual departments concerned have collaborated during the past few years with Consolidated Edison's safety bureau in their approach to street safety problems, it was felt that integration of effort under one committee in which all companies are represented would be more effective.

The street protection committee experimented with mobile equipment, protective equipment, traffic warning devices, color combinations and work area layouts. New York City officials were consulted and street opening problems in other cities were studied.

The results were procedures which could be applied to setting up work area protective equipment under different operating conditions and the standardization of equipment. Trucks, tool carts, manhole guard rails, barricades and other accessory equipment have been painted a bright orange which, tests indicated, provided maximum day and night visibility. Even orange tarpaulins have been made available.

Approaching motorists are warned of the presence of utility work areas by powerful red flashers that give off an intermittent beam and can be connected to an AC power source op battery-operated. Supported by telescopic brackets, these flashers can be mounted on tool carts or on individual bases. They can be

set at different elevations so as to be seen from a distance over the top of intervening traffic as well as at close quarters.

Eye-catching signs made from a white reflecting material bearing the company name, the Edison Man symbol and a "Men at Work" slogan have become standard equipment for all splicing and tool carts.

During April and May more than 600 field force supervisors and first line mechanics from Consolidated Edison and its subsidiaries attended a special series of lectures and demonstrations and were briefed on the system's new equipment and standard operating procedures. They were given a new manual on planned work area protection which outlines the purpose of the program, tells how to implement it, describes and illustrates new protection equipment and provides equipment layout diagrams for different street operations.

To insure that future improvements in equipment or operating practice are not overlooked, the System's Street Protection Committee, under the chairmanship of William F. Brown, company safety director, will undertake a continuing study of the street safety situation throughout the territories served by the system. Mr. Brown is a past-chairman of the Accident Prevention Committee, American Gas Association.

Giant chicken fry employs gas fuel

THE WORLD'S LARGEST chicken fry, using gas as the fuel, climaxed the Del-Mar-Va Chicken Festival in Dover, Del., under the sponsorship of Delaware Poultry Improvement Association on June 14. For two days prior to the fry, some 140 women competed for prizes of modern ranges by cooking their pet chicken recipes.

Feature event on the last day of the festival was the giant chicken fry. One-half ton of chicken was deep fat fried in the world's largest frying pan. The pan was made of eight gauge sheet steel all welded, 10 feet in diameter, eight inches deep with a five-foot handle. The lid was made of reinforced aluminum and together with the pan weighed 650 pounds empty. The Mumford Sheet Metal Works, Shelbyville, Del., made and donated the pan

and lid to the association.

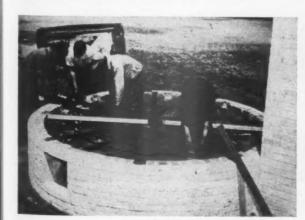
To supply the necessary heat for this load, The Dover (Del.) Gas Light Company through the cooperation of C. A. Burger, superintendent of gas operations, built a special gas burner. The pan was supported by a brick wall ten feet four inches in diameter, eight inches thick, and two feet high with a seven-foot chimney. Holes were left in the brick wall at intervals to provide secondary air to the built up burner.

A two-inch gas service pipe was run to which two-inch manifolds were connected and spanned the area inside the brick wall. To these manifolds 1½-inch burner pipes were connected fanning out to within six inches of the brick wall. The ports were made with a 5/32-inch drill. The orifice drill was 11/64 inches.

Eight inches of gas pressure was used and the input of 800,000 Btu per hour maintained the cooking fat at 330° F. When the lid was removed the temperature dropped only five degrees and recovered almost immediately.

To fry the half ton of chicken required 140 gallons of cooking oil which filled the pan to three inches, 300 pounds of flour, 30 dozen eggs, 12 pounds of paprika, two pounds of pepper and two pounds of sakt. The total weight of chicken, fat and other ingredients was over one ton. Enough fried chicken was given away free for each of the 4,000 onlookers to have one piece.

The frying pan and burner equipment will be kept intact by the gas company for similar use at future festivals.



(left) workmen completing construction of world's largest frying pan erected by The Dover (Del.) Gas Light Company for the city's chicken festival. Chefs



at right are shown deep fat frying one-half ton of chicken during feature event on last day. The company will use the equipment at future festivals

New Freedom Gas Kitchens star in California



One of the four completely automatic New Freedom All-Gas Kitchens installed in home exposition

building interior decoration and residential planning will go to the Los Angeles Unit of the Shriners' Hospitals for Crippled Children.

One of the most prominent features of the four homes is the installation throughout of completely automatic, work-saving, New Freedom All-Gas Kitchens. Equipment in these sparkling modern kitchens includes a gas reNew filter developed

AN EFFICIENT FILTER PAPER for remov. ing fine dusts, oily smokes and fumes has been developed by the laboratory of Arthur D Little, Inc., Cambridge, Mass., under a contract with the Atomic Energy Commission. The commission is arranging for private manufac. ture of the new item and expects that in the near future the filters will be available for various industrial uses. Although these filters have been developed for the special purpose of fil. tering out any radioactive material in heating or ventilating air from atomic energy operations, it appears that they will have many uses for industry in general.

The filter paper can be made with an effi. ciency better than 99.99 percent for dusts and mists averaging in size down to and below half a micron. Being relatively thin, the filtering medium can be folded or otherwise manipulated to give large areas of filter medium for small face area. Properly protected by forefilters or roughing filters in the nature of coarse fabric, air washers, etc., the filter units may be expected to last for months.

frigerator, CP automatic gas range with clock control, gas water heater, gas garbage and waste disposal unit and gas clothes dryer. In addition, one kitchen is equipped with a gas barbecue. In the other three homes this appliance is installed in the patio.

House heating in three of the homes is furnished by a forced air heating system.

Gas industry represented at safety conference

MORE THAN 1,000 representatives from the nation's major industries attended The President's Conference on Industrial Safety in Washington, D. C., June 5-7, 1950. At the invitation of President Truman, the gas industry was represented by A. Gordon King, secretary

CALIFORNIA'S first luxury home exposi-

public inspection on June 4.

tion, "Castles in the Air," was opened for

The exposition features four estate-class

homes, representing a combined investment of

more than \$350,000 in land, buildings, and

furnishings. All proceeds from this exhibit

of the latest advances in architectural design.

Operating Section and Accident Prevention Committee, American Gas Association. President Truman also opened the sessions.

A major accomplishment of the three-day conference was to crystallize thinking on safety and accident prevention. Top officials of national safety groups pointed out the need for more scientific accident-cause analysis. The sessions also brought together many persons who are active in work of the Public Utilities Section, National Safety Council, and the Accident Prevention Committees of A. G. A. and EEI.

Gas industry officials map coordinated efforts



Associated organizations meeting at A. G. A. headquarters on June 6, 1950: (Left to right around table) A. F. Herwig, Wisconsin Utilities Association; Harold Massey and H. Leigh Whitelaw, GAMA; William Naile, Pennsylvania Gas Association; H. E. Peckam, Mid-West Gas Association; John W. West, Jr., Frederic Moshier, A. G. A.; Clark Belden, New England Gas Association; Mark Shields, Pennsylvania Natural Gas Men's Association; George H. Smith, A. G. A.; John E. Kern, Pacific Coast Gas Association; Clarence W. Goris, Indiana Gas Association; Robert R. Suttle, Southern Gas Association; H. Carl Wolf, A. G. A.; Edward W. Ruggles, Mid-Southeastern Gas Association, and Kurwin R. Boyes, A. G. A.

"Court of Flame" king to be honored

THE GAS water heater salesman who sells the greatest number of top quality "Court of Flame" automatic gas water heaters in the nation from March 1 to August 31, 1950, will be honored in a special coronation ceremony of the king will take place on Dealers Day at the Exposition of Gas Appliances and Equipment to be held by Gas Appliance Manufacturers Association. The huge exposition will be held in conjunction with the 1950 Convention of American Gas Association.

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The announcement was made by Stanley C. Gorman, director of the current "Court of Flame" automatic gas water heater campaign. According to Mr. Gorman, "A colorful ceremony will be held during the convention and exposition where the leading water heater salesman in the nation will be crowned 'King of the Court of Flame,' with a beautiful jewelled, gold and red crown. This crown will symbolize the best sales effort for sales of automatic gas water heaters, and the winner will receive additional prizes of a three-day all-expense trip for two to visit the exposition."

The king will also be awarded \$500 worth of merchandise. This top salesman will reign as "King of the Court of Flame" from October 4, 1950 to September 30, 1951.

The entourage of the king's court will be made up of the water heater dealer salesmen in each of the 48 states and the Territory of Hawaii who sell the largest number of "Court of Flame" heaters. Each will reign as a knight of the "Court of Flame" during the same period. A parchment, suitably inscribed, will be presented as evidence of each knight's sales superiority in his state. In addition, he will receive an award of \$50 worth of merchandise.

The above awards are in addition to \$180,000 worth of prizes which retail water heater salesmen may win through accumulated point values in the 1950 "Court of Flame" sales program.

• "I have surveyed 100 different types of labor-management relations. I used a simple method: I drank beer with people on both sides, continuously for three years, and beer drinking did over half the work."

-Dr. Fred H. Harbison, chairman, Arbitation Board of U.S. Steel Corporation.



Hugh H. Cuthrell, president, A. G. A., tries on "Court of Flame" Crown which will be presented to nation's top gas water heater salesman at GAMA Exhibition in October. Left to right are: H. Leigh Whitelaw, GAMA managing director; Stanley H. Hobson, GAMA president and H. Carl Wolf, A. G. A.



One of the first prize point certificates presented in 1950 "Court of Flame" contest was won by J. R. Musselman, Southern California plumber-dealer. Shown at presentation are, (left to right) R. D. Mac-Mahon, Southern California Gas Co.; Mr. Musselman and G. F. Scherer, Southern Counties Gas Co.

Salesmaker series packed with ammunition

a PAR activity

GAS APPLI-ANCE sales promotion received an added boost re-

cently with the completion of a series of seven pocket-size salesmakers by the Residential Gas Section and the Promotion Bureau of American Gas Association. Produced under the PAR program, these five-by-seven-inch booklets, range from 28 to 32 pages, packed with sales ammunition on basic domestic gas appliances.

The series covers gas ranges, automatic gas

water heaters, gas refrigerators, automatic gas clothes dryers, gas house heating, all-year gas air conditioning, and gas incineration. Authoritative material in the booklets was compiled by the respective Residential Gas Section committees and edited to present the greatest possible sales impact.

Advantages of gas equipment over competitive appliances are summarized in each booklet, as well as the superiority of gas as a fuel in addition, the salesmakers highlight the market potential and present valuable informa-

tion on finding prospects and how to demonstrate and sell. Special sales techniques and years of sales experience are summarized.

The salesmakers provide the basis for a comprehensive sales training program for utility, dealer and manufacturer sales organizations. Each of the seven manuals is available at the following prices: single copies, 15 cents each; ten or more copies, 10 cents each. Orders should be addressed to Promotion Bureau, American Gas Association, 420 Lexington Ave., New York 17, N. Y.

ISSUE OF JULY-AUGUST, 1950

Northern Natural to erect new main office

NORTHERN Natural Gas Company has announced plans to construct a new main office building in Omaha, Neb., directly across from the renowned Joslyn Memorial, Omaha's art and cultural center. Ground will be broken for actual construction about July and completion is expected by October 31, 1951.

Expansion of the company's pipeline system since the end of the war has resulted in increasing the pipeline capacity from 242 million cubic feet to 600 million cubic feet and is expected to continue at the same rapid pace for several years. This has resulted in large increases in personnel, to the extent that the company has outgrown its present space and will require still further office space to meet the expected needs of the next few years.

To be six stories in height, the new structure will be an extremely functional and practical office building similar in style to the United Nation's Secretariat Building in New York and the U.S. Steel-Mellen Office Building in Pittsburgh.

The six-story building will be situated on land with frontage of 240 feet and 146 feet deep. Land has also been purchased for a company car garage with space for 40 cars. In addition, off-street outside parking on the grounds will accommodate about 75 more cars.

The rectangular building will have 52,000 square feet of usable floor space. Provisions have been made for adding two wings on the rear with about 32,000 square feet of additional space if needed in the future. This

would give the building a "U" shaped appear. ance.

Natural gas burning units will provide year around air conditioning for the entire building.

Movable partitions will be used throughout the building to allow addition of new private offices when necessary or expansion of existing ones. This arrangement will allow considerable flexibility in departmental arrangements. At present, Northern Natural employs about 340 people in its home office.

Construction of the new building is part of Northern Natural's 1950 expansion program which will cost approximately 50 million dollars. The company is boosting its daily capacity from 470 MMcf to 600 MMcf during 1950.

A.G.A. prepares bibliography on gas changeover

A COMPREHENSIVE BIBLIOGRAPHY on Changeovers from Manufactured to Natural Gas, 1928—April 1950, prepared by the Association's library staff, is available without charge. It lists 139 articles covering a wide variety of experience and problems encoun-

tered in conversion operations. Among the topics included are: advance planning and organization, effect on distribution systems, training personnel, converting and servicing appliances, public relations and sales policies, home service cooperation, and effect on revenues.

Articles covered in this new bibliography have appeared in A. G. A. and other association publications, gas trade journals, etc.

Requests for copies should be addressed to Mary E. Agee, Librarian, American Gas Association, 420 Lexington Ave., New York 17.

GAMA publishing CP prize demonstration booklet

PRIZE-WINNING CP range demonstrations from the recent nationwide contest sponsored by Home Service Committee, American Gas Association, will be available to the industry late in July or early in August. Each demonstration was based on sales-slanted interpretations of the features of automatic gas ranges built to CP standards.

The booklet is being published by the CP Manufacturers Group, Gas Appliance Manufacturers Association. The GAMA group also contributed cash prizes for the demonstration contest (see A. G. A. MONTHLY, June 1950, p. 43). Four top winning demonstrations in the contest will be reproduced in full together with scripts of the remaining 25 wingether with scripts of the remaining 25 win-

ners.

Single copies of the booklet of demonstrations will be sent to all home service directors. Extra copies for home service representatives, sales managers and others in the gas industry will be available from American Gas Association or Gas Appliance Manufacturers Association at 25 cents each.

A. G. A. entertains women broadcasters

MEMBERS of the Association of Women Broadcasters of the National Association of Broadcasters are better equipped today to explain to the public newsworthy developments in gas laundry equipment. Valuable pointers on broadcasting information about the gas equipped laundry were outlined at the group's annual meeting last month in Cleveland.

In a special show sponsored by American Gas Association, members of the A. G. A. Publicity Bureau showed the women broadcasters how to obtain newsworthy program material, and do it inexpensively, by taking tape recorders to the demonstration floors of gas companies. Interviews with the home economics staff of the gas companies and talks

with customers on the demonstration floors were suggested.

Highlighting the visual-oral demonstration was a complete laundry-utility room set up in the Grand Ballroom of the Hotel Cleveland. Equipment included a gas dryer, automatic gas water heater, and gas furnace, as well as an automatic clothes washer and an ironer.

The script for the show described how the homemaker can avoid laundry drudgery through use of modern gas appliances—an automatic gas dryer for her clothes, a correctly-sized automatic gas water heater for ample supplies of hot water, and a modern gas furnace for scientifically controlled room temperature.

Nancy Dixon, WTAM, Cleveland, took the part of the broadcaster, Jean Clarke Thompson the home demonstrator and Mariane Wulff of WERE, Cleveland, acted the part of a typical customer. A buffet luncheon was served to approximately 200 women broadcasters and other guests after the demonstration.

During their meeting, a number of the broadcasters saw the telecasting of The East Ohio Gas Company's television program at the utility company's TV studio. They were guests of Harold E. Eckes, director of publicity and advertising for the company.



Laundry-utility demonstration with gas dryer, water heater and furnace, staged for the Association of Women Broadcasters. Taking part in the non-live radio show were, left to right, Mariane Wulff, WERE commentator, Cleveland; Jean Clark Thompson, A.G.A.; Nancy Dixon, WTAM commentator, Cleveland

"Speedy Therm" symbolizes modern gas service

A NEW CHARACTER symbolizing gas service has been introduced to the industry by Rochester Gas & Electric Corp., Rochester, N. Y. He is called "Speedy Therm" and the Rochester utility already has presented him in a number of advertisements promoting the sale of gas appliances.

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Speedy Therm is the copyrighted property of A. W. Whittlesey, vice-president, Pennsylvania Company for Banking, Philadelphia, and a director of the Rochester company since last October. Plans are now being made for authorizing use of Speedy Therm by gas companies throughout the country on a cost per meter basis. Details of the plan can be obtained from Mr. Whittlesey.

Rochester Gas & Electric in presenting the new character to the public said this about him: "Speedy Therm is the happy little character who symbolizes good gas service, which does so much to make your life easier and pleasanter. How did Speedy Therm get his name? Well, a therm is a unit of heat and, in-asmuch as gas is the fastest of all fuels, Speedy Therm is an appropriate name for the heat that gas produces."

Speedy Therm made his bow through a series of teaser advertisements, spread through the Rochester dailies for five days. On the sixth day he made his bow in a five-column revelatory advertisement. The Rochester company is using him on television, in window and counter displays, as well as in newspaper advertisements.

Pipeline developments

- Pacific Northwest Pipeline Corporation— This company has applied to Federal Power Commission for authorization to construct a 2,175-mile pipeline system from southern Texas to the state of Washington. The proposed project, estimated to cost \$174,186,602, would link the Texas gas reserve areas with gas fields in Alberta, Canada, to meet the requirements of the Pacific Northwest markets, including Vancouver, British Columbia. The main 26-inch line would have an initial delivery capacity of 250 million cubic feet per day. The company also proposes to purchase approximately 100 million cubic feet daily at or near the U.S.-Canadian boundary through a line extending from the proposed main line northeasterly to Eastport, Idaho.
- Valley Gas Pipeline Co., Houston, Texas —Construction of a \$144,500,000 pipeline project to carry natural gas from the Gulf Coast and off-shore fields in Louisiana and Texas to markets in Indiana, Ohio and Michigan has been proposed by this new Houston corporation. The FPC application specifies that the system would include a 1,000-mile, 30-inch line from Hardin County, Texas, into southern Michigan. An additional 500-mile 24-inch line in Louisiana and Texas is contemplated. Initial delivery capacity is estimated at 330 million cubic feet per day with an ultimate goal of 505 million cubic feet daily.
- Texas Eastern Transmission Corporation
 —Algonquin Gas Transmission Company's
 plan to bring natural gas to New England was



Speedy Therm, the handy household helper, makes his bow in Rochester Gas and Electric advertising

completed May 24 when its supplier, Texas Eastern, completed a contract with United Gas Pipe Line Company calling for annual deliveries of approximately 134 billion cubic feet of gas. This is almost twice the amount that Algonquin will require from Texas Eastern. FPC hearings on applications to supply the New England market are continuing.

● Southern Natural Gas Co., Birmingham, Alabama—FPC has authorized Southern Natural to expand its natural gas pipeline system in the south. The project, estimated to cost \$32,928,630, will include 496 miles of new high pressure lines extending from Gwin-ville, Miss., gas field to Aiken, S. C., and 311 miles of laterals and branch lines. Compressor

additions will be included in the new facilities which will increase daily delivery capacity from 420 million cubic feet to 529 million cubic feet.

● New York State Natural Gas Corp., New York City—Pipeline construction is proposed by the New York firm and The East Ohio Gas Co., Cleveland, to make additional natural gas available to East Ohio during the winter months. FPC permission is sought to build a 63-mile, 20-inch line from Westmoreland County, Pa., to the Pennsylvania-Ohio state line to connect with a one-mile, 20-inch line in the Petersburgh, Ohio, area. Estimated cost is \$3,792,806 for New York State Natural and \$40,940 for East Ohio.

ISSUE OF JULY-AUGUST, 1950

Five-month appliance shipments increase

RECORD NUMBERS of gas-fired central heating units and automatic gas water heaters were shipped during the first five months of 1950. A near record was established during the five-month period for domestic gas range shipments, according to Gas Appliance Manufacturers Association.

Gas-fired central heating equipment shipped during this period totaled 307,400 units, or 164.5 percent more than 116,200 units shipped during the same period of 1949. The new total was 15 times more than the 1936-40 average shipments for the period. These units included furnaces, gas-fired boilers and gas conversion burners.

Gas-fired furnace units totaled 171,200, an increase of 190.7 percent over the 58,900

units shipped in the first five months of 1949, and 14.5 percent greater than the prewar 1936-40 average.

Shipments of gas conversion boilers totaled 117,900 units, an increase of 154.1 percent over the 46,400 shipped in the same period last year, and 17 times greater than the 1936-40 average.

Gas-fired boiler units totaled 18,300, or 67.9 percent over the 10,900 shipped in the first five months of 1949, and seven times greater than the 1936-40 average.

Shipments of 1,111,000 domestic gas ranges were reported in the first five months of 1950. This was 64 percent greater than the 677,600 units shipped in the same period last year, and compares favorably with the

1,206,400 shipped during the like period in 1948, the all-time peak year.

Domestic gas ranges during May 1930 totaled 227,000 units, an increase of 49.7 percent over May 1949.

The total of 831,600 automatic gas water heater units shows an increase of 61.7 percent over the similar period of 1949. During the industry's peak year, 1947, some 806,900 automatic gas water heaters were shipped during the first five months.

Preliminary reports indicate that 194,000 gas water heaters were shipped during May 1950, and for the third straight month reached a new all-time high. May 1950 gas water shipments were 61.4 percent greater than during the same month of last year.

Natural gas survey made by GAMA

NATURAL gas may soon be available to "every major city in the United States," according to a study made by the Gas Appliance Manufacturers Association and based upon data made available by the Federal Power Commission.

The study indicates that the principal impact is and will be along the Eastern Seaboard, with every major city from Maine to Florida eventually receiving natural gas.

During the four and a half years, July 1, 1945 to January 1, 1950, the Federal Power Commission authorized construction including 26,513 miles of natural gas pipe lines, costing a total of \$1,682,000,000, according to the survey.

Despite the fact that 1948 and 1949 established new records in Federal Power Commission authorizations of natural gas pipe lines, applications pending before the Commission on February 1st "provide for an agregate increase of 4,700,000,000 cubic feor an attural gas a day." During 1949 the Commission authorized construction including 7,537 miles of new pipe lines, costing \$600,000,000, to bring new gas facilities or to augment supply to more than 100 cities of over 50,000 population and to increase the available supply by 3,000,000,000,000 cubic feet daily.

Major eastern cities which will be benefited through authorizations already approved to receive natural gas include, among others, the New York Metropolitan area; Baltimore,

Md.; Washington, D. C.; Wilmington, Del.; Chattanooga, Knoxville and Nashville, Tenn.; Philadelphia and Harrisburg, Pa.; Camden, Jersey City, Trenton and Bayonne, N. J.

Cities destined to get natural gas for the first time under pending authorizations, include among others, Jacksonville, Fla.; Savannah, Ga.; Charleston, S. C.; Charlottesville, Richmond and Norfolk, Va.; Utica, Albany and Schenectady, N. Y.; Boston, Cambridge and Springfield, Mass.; Bridgeport and Hartford, Conn.; Providence and Pawtucket, R. I.; and Manchester, N. H.

The study gives full details on Federal Power Commission authorization of major projects involving the cost of \$1,421,337,000 for construction including 22,326 miles of pipe lines. These pipe line projects authorized by the FPC in the past four and a half year period required an estimated 5,337,900 tons of steel pipe ranging in size from 2 to 34-inches outside diameter.

The GAMA study excludes the Big Inch and the Little Inch Lines, built by the government during the war for transporting crude and oil products to the Atlantic Coast from Texas, and after the war converted to natural gas lines. It also excludes projects costing less than \$250,000.

Copies of the study may be obtained by writing to Gas Appliance Manufacturers Association, 60 East 42nd Street, New York, N. Y.

Gas sales increase

TOTAL SALES of gas by utilities to ultimate customers in April 1950 were 3,833, 277,000 therms, an increase of 31.1 percent over the 2,925,046,000 therms sold in April 1949, according to an American Gas Association report. For the 12 months ended April 30, 1950, total sales of gas amounted to 37, 678,745,000 therms, a gain of 11.6 percent compared with 33,761,534,000 therms sold in the comparable period a year earlier. The Association's index of gas sales for April 1950 was 302.4 percent of the 1935-1939 average.

McCarter award winners

SEVEN employees of the Consolidated Edison Co. of New York, Inc., recently received McCarter Medals or Certificates for their outstanding acts of life saving. The awards are presented by the American Gas Association for successful application of the Schafer prone pressure method of resuscitation.

Bernard E. Leary, Walter J. Canning, Daniel M. Driver, and Frank A. McCafferty were awarded McCarter Medals. Louie Lippert and Robert F. Rafanelli received Mc-Carter Certificates of Assistance while Edward Fritz was awarded a McCarter Certificate of Recognition.

Formal presentation of the awards was made by the company with appropriate ceremony.

New publication serves gas heating

NEWEST ADDITION to the gas industry's family of trade publications is a handsome fellow which was christened last month under the expressive title of "Gas Heat." Prime editorial purpose of the new arrival is to help the gas appliance dealer and contractor do a better job of management, selling, installing and servicing of gas equipment.

Vital statistics are as follows: Place of arrival—New York City, Heating Publishers, Inc., 17 East 37 St.; date of arrival—June 1950; parents—A. E. Coburn, editor, and A. G. Winkler, advertising manager; size at

birth-50 pages and cover.

Also playing an important role in the christening was Louis J. Boasi, formerly publicity assistant for The Brooklyn Union Gas Co., who has been named assistant editor of Gas Heat. While serving with the gas company in Brooklyn, Mr. Boasi edited a monthly publication The Dealer's Choice.

Welcome to the fraternity, Gas Heat! May your life be long and flourishing—your success exceeded only by the growth of gas as the nation's first choice for modern heating applications.

Corporate changes

The Perth Amboy Gas Light Company has been merged into the Elizabethtown Consolidated Gas Company, which has its main office at 16 West Jersey St., Elizabeth 4, New Jersey.

Wisconsin Gas and Electric Company announces that its electric utility has been purchased by and will be operated under the name of Wisconsin Electric Power Company, the parent company. The gas utility will be operated under the new name of Wisconsin Natural Gas Company, 100 Third Street, Racine, Wisconsin.

A.G.A. sponsors Accident Prevention Conference

AN Accident Prevention Conference, the first of its kind sponsored by A. G. A., will be held September 18-20 at the Wardman Park Hotel, Washington, D. C. The Association's Accident Prevention Committee of which W. H. Adams, safety director, The Manufacturers Light & Heat Co., Pittsburgh, is chairman, is arranging a comprehensive program of wide interest to utility safety men. In addition to the customary work of the A. G. A. committee, reports of subcommittee chairmen, and discussions, special presentations on automotive safety will be sponsored by the Motor Vehicles Committee of the Operating Section. Matters of special interest to operating men will also be covered by Gas Production and Chemical Committee representatives.

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A special presentation is being arranged by the A. G. A. Testing Laboratories. An effort will be made to present an informative analysis and interpretation of accident statistics by the A. G. A.-EEI official delegate to the American Standards Association Project 7.16

E. J. Kennelly, Texas Eastern Transmission Corp., Downington, Pa., heads the Committee on Arrangements. He is assisted by E. S. Beaumont, The Peoples Gas Light and Coke Co., Chicago; W. F. Brown, Consolidated Edison Co. of New York, Inc.; and H. T. Jayne, The Philadelphia Gas Works Company.

In expanding the committee meeting into conference, the Accident Prevention Committee hopes to secure the cooperation of adjacent safety groups as well as to arrange for visits of inspection to the Washington Gas Light Company's system. Donald S. Bittinger, general superintendent of the Washington utility, is acting as liaison mem-

Details of the successful changeover of the Washington utility from manufactured to natural gas are expected to be shown the visitors. Topics on the tentative agenda for the conference include: safety as a labor standard, national safety responsibilities, fire fighting, street excavations, safe operation of automotive fleets, natural gas pipeline problems, consumer and employee safety angles. and safety research. Several films of special interest to this group will be shown.

The National Safety Council will cooperate with the conference through George McDonald, secretary, Public Utilities Section, and member, A. G. A. Accident Prevention Com-

An attendance of more than 200 is expected. The committee urges all safety men to make early reservations to assure satisfactory accommodations.

CP group calls for higher range sales goals

SALES of between four million and five million gas ranges a year have been suggested in a special resolution to the gas industry by the CP Manufacturers Group of the Domestic Gas Range Division, Gas Appliance Manufacmrers Association.

Meeting at White Sulphur Springs on May 28, the group concluded that the industry as a whole is not setting its sights high enough.

The resolution emphasized that an increasingly large portion of existing homes and of the approximately one million new homes being built annually are being captured by competitive fuels. The group noted also that more than 27 million U. S. homes use gas for cooking; that approximately more than 11,325,000 of the gas ranges in use are more than ten years old and should be replaced. Some 2,750,000 gas ranges were sold in 1948 and 2,160,000 in 1949 the resolution pointed out.

Outlining the group's position, Harold E. Jalass, CP chairman, called for more aggressive sales efforts and industrywide effort to sell profitably between four million and five million gas ranges a year.

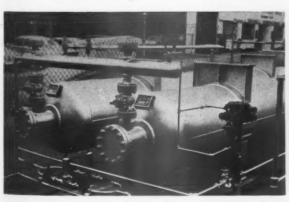
Laboratories add gas storage facilities

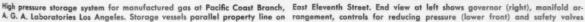
NEW STORAGE facilities for manufactured gas to test appliances have been installed and placed in operation at Pacific Coast Branch, American Gas Association Laboratories.

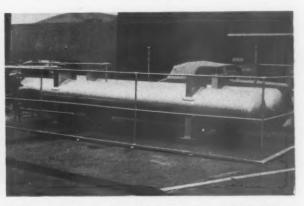
The storage system, consisting mainly of two space saving, high pressure vessels, provides approximately eight times the capacity of the water seal holder formerly used. It not only insures an adequate supply of gas for the Laboratories' increasing test load but makes it possible to greatly improve the operation of the plant used to produce test manufactured gas by reforming natural gas.

Limited capacity of the low pressure holder employed formerly made it necessary to maintain the reforming plant at a high operating temperature continuously in order to insure an adequate supply of test gas at all times. With the new arrangement, adequate service may be maintained for three weeks without replenishing the high pressure vessels. This materially reduces the man hours necessary for operation of the reforming plant and permits it to be maintained on a standby or low heat condition most of the time. It also permits maintenance and repairs to be made without affecting the testing schedule and greatly prolongs the life of the reaction or cracking tube.

The new system has a capacity of 6,500 cubic feet of gas at 450 pounds pressure. Two more vessels may be mounted above the present installation when additional capacity is needed. Gas from the reforming plant passes. into the water seal holder previously used and then to a compressor which delivers it to the storage vessels. Connections have been arranged so that gas may be supplied to the test floor directly from the water seal holder, thus providing additional flexibility of operation if conditions require.







Industry urged to dispel economic ignorance

A SURVEY shows that about 45 percent of the American people believe that corporations make more money than they report.

It also reveals that about 64 percent believe that the owners of business get more money in profits than the workers get in wages. Walter Reuther's suggestion that industry's profits in 1947 be reduced from 17 billion to 8.8 billion dollars received cheers from too many Americans.

Ever since the veto over a year ago of the revised O.P.A. price control bill, the Administration, with a great deal of success, has tried to shift the full blame of rising prices to the shoulders of industry. As one of its last acts, the O.P.A. tried to convince Americans that industrial profits during the war had risen in some cases as much as 2,431 percent.

Even before the Taft-Hartley Act was passed, it had been widely labeled a management act to enslave labor. This despite the fact that nearly 85 percent of the people couldn't name one bad feature of it.

Business men are being blamed generally for high prices, high profits, inadequate wages and unfair labor laws. And whatever their motives, attackers of business are doing a good job of making themselves believed. Macfadden Publications has found out that: 30.7 percent of wage earners think the government should own and operate banks; 23.4 percent think it should own and operate railroads; 21.6 percent think the same about coal mines and electric and gas utilities; 16.7 percent approve government owned and operated telephone and telegraph companies; 8.7 percent favor government ownership and operation of consumer goods manufacturers.

The attackers of business are plausible for at least two reasons—they carefully omit any facts which would weaken their story; and business men in general seem too preoccupied to tell the facts of business life.

How many know that workers take out of business about ten times as much in wages as the stockholders do in profits?

How many know that the increased proft which business is making is on a vastly increased volume of business? That the percentage of profit which most units of business are making today is less than in boom years before the war?

How many know that many stockholden haven't gotten an increase in dividends since before the war, despite the fact that prices and the cost of living have been going up for them just as for everybody else?

How many know that the average corporate stock over a long period of years does well to pay three and one half percent?

How many know that far from being able to finance themselves out of profits, corporations in the first nine months of 1945 sold 830 million dollars' worth of securities to raise money for operating capital and to finance expansion? And that in the same period of 1946 corporations had to sell two billions in new securities and in the first nine months of 1947 they had to sell 2.7 billions?

How many know that a large corporation can sell 150 million dollars' worth of its products and still go broke? How many know that the steel industry, which is one of the focal points of attack, will lose money hand over fist if it operates at 50 percent of capacity?

How many know that in the first half of 1947, industry spent for additional plants, tools, equipment and inventories about 11 billions, or approximately two and a half billion dollars more than the total profits of industry for the first six months of the year?

The answer to all these questions is, "Not many." And sad to say, there are a lot of business executives who, if they know all this, aren't sharing their knowledge with their workers or the public.

Awhile back, Philip D. Reed, board chairman of General Electric, pointed out that people can like a company's product and yet dislike the company itself.

We spend about three billions each year to advertise the products of industry and a lot more billions in direct selling costs. Isn't à about time we used some important money, brains and energy to sell the system which makes the products possible?

-Ketchum, MacLeod & Grove, Inc. Pittsburgh, Pa.

Model kitchen sparks Bridgeport sales



Dual-purpose kitchen installed recently by the Bridgeport Gas Light Company for demonstration use and as a model for homemakers planning new or remodeled kitchens. Installed by Kitchen Maid Corporation, the kitchen is built on two walls, with the range, refrigerator and sink on one wall. Bright colored decorations, fluorescent lighting, and a ventilating fan are attractive features

Home service demonstrates cool cookery



"Cool Cookery" was the theme of demonstration by the home service department of The Philadelphia Gas Works Company, June 16-17, on the sales floor of Gimbel Brothers store. Mrs. Doris Guba appears at the demonstration table and Patricia Floyd at the range. Foods were served at a garden party on the sales floor and three Gimbels' departments cooperated in the demonstration

Charleston Group executives promoted

DIRECTORS of companies of the Charleston Group, The Columbia Gas System, Inc., have elected H. C. Mefford, Sr., as vice-president and general manager, and John W. Partridge as assistant to the president of all the companies. Newell W. Lewis was elected assistant treasurer, and Homer Workman, assistant vice-president of all the companies. Clyde Alstadt was elected vice-president, Atlantic Seaboard Corporation and Virginia Gas Transmission Corporation.

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In addition, Oliver S. Hagerman, president of the Charleston Group Companies, announced the following promotions: J. J. Martin from general superintendent to assistant general manager; John Kelley from superintendent of transmission to general superintendent; Vernon Frazier from assistant superintendent of transmission to superintendent of

transmission. Ray Eckel, Lexington, Va., was promoted to superintendent of transmission of Atlantic Seaboard Corporation and Virginia Gas Transmission Corp., succeeding Clyde Alstadt who was elected vice-president.

Alstadt who was elected vice-president.

John W. Partridge, since his return from the armed services in December 1945, has been connected with Columbia Gas System in the New York office. He was recently elected assistant vice-president, Columbia Engineering Corporation. He worked for Charleston Group Companies as an engineer in the compressor department from 1931 to 1943. Mr. Partridge is a graduate of Lafayette College.

H. C. Mefford, Sr., has been associated with the company for approximately 35 years and has served as vice-president in charge of operations since 1936.

Newell W. Lewis has been employed by the company since June 12, 1931 and has held various positions with the utility's treasury department.

C. Homer Workman was elected assistant secretary on May 24, 1949 and has been in charge of statistical work for the companies.

Clyde Alstadt has been superintendent of transmission, of Atlantic Seaboard Corp., since November 16, 1943. He was first employed on August 1, 1921 by a predecessor, Ohio Fuel Supply Co., and has held various positions in gas measurement, gas engineering and transmission departments.

J. J. Martin has been employed by the company since May 7, 1928, having held positions



J. W. Partridge



H. C. Mefford, Sr.

in the land department and later as general

John W. Kelley has been superintendent of transmission lines for United Fuel Gas Company since February 1, 1944. He was first employed on August 1, 1928 and has held various positions in the transmission department. Mr. Kelley and Mr. Partridge are both members of American Gas Association.

Vernon E. Frazier who becomes assistant superintendent of transmission has been assistant to Mr. Kelley.

Ray Eckel has been assistant superintendent of transmission lines for Atlantic Seaboard and Virginia Gas Transmission Companies.

The Charleston Group of Columbia Gas System is comprised of the following Companies: United Fuel Gas Co., Amere Gas Utilities Co., Virginia Gas Distribution Corp., Central Kentucky Natural Gas Co., Atlantic Seaboard Corporation and Virginia Gas Transmission Corporation.

Personal and otherwise

Honored by American Standards Association

DOBERT G. GRISWOLD, Cities Service Company, New York, representing American Gas Association, and Harold Massey, assistant managing director, Gas Appliance Manufacurers Association, have been honored by the American Standards Association. They received honorary certificates in recognition of their work on the ASA Standards Council.

Both Messrs. Griswold and Massey were cited in "recognition of contributions to the democratic processes leading to the establishment of voluntary American standards and in appreciation of sound advice and devotion of energy to the furtherance of the standards movement as a means of advancing the national economy."

Thomas D. Jolly, Pittsburgh, president of ASA, made the presentations during ceremonies on May 19, 1950, at ASA headquarters in New York. Mr. Jolly, vice-president, Aluminum Co. of America, said members of the ASA Standards Council were responsible for approving more than 1,100 American Standards which form the basis of mass production techniques.



R. G. Griswold



H. L. Massey

Three executives promoted at Rochester

THREE EXECUTIVES have been promoted by Rochester Gas & Electric Corp., Rochester, N. Y. All three men are members of American Gas Association.

Robert E. Ginna, formerly vice-president in charge of sales and regulatory matters, has been made executive vice-president, a new position in the company. Ernest J. Howe has added comptroller to his title of vice-president in charge of finance. Leo H. East, formerly general superintendent of the gas division, has been made vice-president in charge of operations.

Mr. Ginna has served as chairman for a number of years of the Association's

Committee on Economics. He is also currently a member, A. G. A. Committee on Comparison of Competitive Services. In 1948 he was one of three winners of A. G. A. Gas House Heating Progress Awards. Since moving to Rochester in 1934 as manager of the rate and contract department, he has been extremely active in both gas and electric industries. He has held the position of assistant to the president of the Rochester utility and was made a vice-president early in 1945.

Mr. Howe was named vice-president in charge of finance for the Rochester company in March 1945. At the time of his appointment he was vice president, New York, Pennsylvania & New Jersey Utilities Company.

Mr. East has been associated with the company since 1923, becoming superintendent of gas distribution, and in 1947, general superintendent of the gas division. He is cur-



R. E. Ginna

rently a member of the Managing Committee, A. G. A. Operating Section.

Consolidated Natural system appoints

GEORGE C. GROW has assumed the duties of chief geologist for The Peoples Natural Gas Co., Pittsburgh, Pa., and Fordyce C. Hauber has been appointed system production and reserves engineer for Consolidated Natural Gas Company.

Mr. Grow will work under the general supervision of Fenton H. Finn, Consolidated system geologist. Mr. Hauber will be responsible for natural gas reserves and related special production problems for the entire Consolidated system.



G. C. Grow



F. C. Hauber

Seitz made Southern Counties sales manager

THE POSITION of manager of sales, Southern Counties Gas Co., Los Angeles, left vacant by the recent death of Floyd S. Parmenter, has been filled by appointment of Frank N. Seitz to the post. Mr. Seitz took over his new duties on June 1.

The new sales manager moved to Southern

Counties Gas Company from its affiliate, Southern California Gas Co., where he held the position of general supervisor of appliance sales and promotion. He has been in the gas business in Southern California since 1939. Mr. Seitz is a member of American Gas Association.

McGlone advanced by Cleveland company

R. McGLONE has been appointed assistant commercial manager, The East Ohio Gas Co., Cleveland, effective June 1, 1950. Mr. McGlone entered the employ of The East Ohio Gas Company in 1924 as customer bookkeeper, then served successively as department supervisor, assistant department head, and department head. His last position was that of field accounting supervisor.

As assistant commercial manager, Mr. Mc-Glone will direct the following activities: field accounting, customer accounting, machine accounting, merchandise accounting, proof listing, and meter reading.

He is a member of the Accounting Section American Gas Association. He has served on the Customer Accounting Committee, has been its chairman and coordinator of the Customer Activities Group, and is a member of the Managing and the Advisory Planning Committees. Mr. McGlone has presently been nominated for vice-chairman of the Accounting Section.

Mr. McGlone is vice-president of the Cleveland Chapter, National Office Management Association



R. F. McGlone

Muehlberg gets new Rockwell post

CLARENCE E. MUEHLBERG has been appointed sales manager of gas products of the Meter and Valves Division of Rockwell Manufacturing Co., Pittsburgh. He is a 30-year veteran in the gas utility field.

Mr. Muehlberg started with the Public Service Co. of Colorado, becoming sales manager of the industrial gas department. For many years he was associated with the Consolidated

Edison Co. of New York as assistant manager, Station Construction and Shops Department.

Active in American Gas Association work, Mr. Muehlberg was admitted to the "Hall of Flame" in 1947 for outstanding contributions in the industrial and commercial gas field. He is a graduate of the Missouri School of Mines and a licensed professional engineer in New York State.

To direct natural gas storage project

SUPERVISION AND MANAGEMENT of the construction phase of the \$39,000,000 North Oakford gas storage project planned by New York State Natural Gas Corporation and Texas Eastern Transmission Corporation will be handled in the Pittsburgh office of The Peoples Natural Gas Company by Edward C. Inghram, Assistant Superintendent of Transmission and Production, it was announced in June by John J. Jacob, Jr., Peoples Vice-President.

Carl A. Spencer, former Armstrong District

Superintendent, has been transferred to temporary Greensburg offices to serve as district superintendent of the North Oakford project. John Bailey, former engineer in Peoples Glenshaw Division, will have charge of engineering work in connection with the storage pool development, according to Mr. Jacob, and Roy P. Swauger has been appointed chief clerk.

The construction phase of the storage expansion program is expected to last three years.

Hendee honored

POBERT W. HENDEE, immediate pastpresident of American Gas Association, has been awarded the "Institution Gold Medal" by The Institution of Gas Engineers, London, England. Mr. Hendee was honored for his paper "Peak Load Problems in the United States" which he presented at the eighty-sixth annual general meeting of the Institution in London on June 13, 1949.

Announcement of the award was made in the agenda for the 1950 annual meeting of The Institution of Gas Engineers in Boumemouth, England, on June 6. Mr. Hendee is currently serving as a director of A. G. A. and also as president, Colorado Interstate Gas Co. Colorado Springs.

Safety Group chairman

LEO R. NUHFER, safety director for The Peoples Natural Gas Co., Pittsburgh, was elected general chairman of the Western Pennsylvania Chapter, American Society of Safety Engineers, at the organization's last regular meeting.

Other officers elected include G. O. Griffin, Dravo Corp., first vice-chairman; R. M. Massenburg, National Tube Co., second vice-chairman; F. W. Kelsey, Jones and Laughlin Steel Corp., treasurer, and E. C. Barnes, Westinghouse Electric Corp., secretary.

Bituminous Coal president

DR. A. A. POTTER, dean of engineering at Purdue University, has been elected president, Bituminous Coal Research, Inc., Pittsburgh, Pa., on a parttime basis. Bituminous Coal Research is the national research agency of the bituminous coal industry.

Gale is vice-president

C. B. ZEIGLER, president, Public Service Company of North Carolina, Inc., Gastonia, has announced the election of R. Gregg Cherry, Charles W. Gale, and William L. Canady as new directors of the company. Mr. Gale, who joined the organization recently, has been appointed vice-president in charge of op-



Charles W. Gale

erations, Eastern Division. He has had wide experience in the gas industry and has been active on American Gas Association committees.

Happiness

 Happiness depends first of all on what is inside the individual. No amount of external things, of happy activity around one, will produce happiness if the inside is full of poison—Recreation.

Consolidated Edison elects vice-presidents

THREE NEW VICE-PRESIDENTS, Dr John J. Wittmer, Earl L. Griffith and Charles B. Delafield, have been elected by Consolidated Edison Co. of New York, Inc.

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Dr. Wittmer, an assistant vice-president since 1946, has been identified throughout his Consolidated Edison career with various phases of employee relations, including supervision of the personnel and medical departments. Mr. Griffith, who has been an assistant vice-president for the past decade, directs the company's extensive construction. maintenance and shops program. Mr. Delafield's responsibilities, which have included corporate finance and advertising matters, were recently extended to include the company's commercial relations department.

Dr. Wittmer is nationally known for his lectures and articles on progressive employee relations and industrial medicine. He has been with the utility system since 1924 when he joined Brooklyn Edison Company as a staff physician. He was appointed medical director of Consolidated Edison in 1937 and added the duties of personnel director in 1939. He became an assistant vice-president, industrial relations, in 1946.

Educated at Fordham University, University of Chicago and Long Island College of Medicine, Dr. Wittmer was appointed consultant to the U. S. Secretary of State during the last war.

Dr. Wittmer is vice-president of the Health

Insurance Plan, a post he was requested to take by the late Mayor Fiorello H. LaGuardia in 1945. He is pastpresident and director. American Association of Industrial Physicians and Surgeons, and director of the Health Advisory Council, U. S. Chamber of Commerce.

Mr. Griffith, immediately after gradua-

tion from Stevens Institute in 1923, was employed by Consolidated Gas, a predecessor company, as an inspector in its construction drafting bureau. Three years later he was made a field engineer in the construction department.

Following merger of various gas and electric companies into Consolidated Edison, he became maintenance and construction engineer. Mr. Griffith was named engineer of gas maintenance construction in 1938 and elected an assistant vice-president, construction and shops, in 1940.

Mr. Griffith is a member of the Engineers' Club, American Gas Association, Society of Gas Engineering of New York City, American Society of Mechanical Engineers, and The Society of Professional Engineers in both New York and New Jersey.



Dr. J. J. Wittmer



E. L. Griffith



Mr. Delafield joined Consolidated Edison in 1946 as assistant to Ralph H. Tapscott. who was then president. He was elected assistant vice-president, public relations, in June 1948 and became assistant to the chairman of the board in February 1949 when Mr. Tapscott was elected to that position. He attended Harvard University.

After college, he served with several leading investment institutions, then in 1942 joined Illinois Power Company as assistant to the president and later as vice-president.

Mr. Delafield is a member of American Gas Association and New York Society of Security Analysts, Inc. He is also chairman, public utility division of the Lighthouse Men's Committee in New York.

Manufacturers announce personnel changes

• Detroit-Michigan Stove Co., Detroit-M. W. Elert has been promoted to assistant sales manager, and E. C. Barrows appointed to succeed him as advertising manager.

Elert joined the company in 1937 while a student at University of Detroit. After three years in the Armed Forces he returned to the company and was made head of the sales order department. In 1949 he became advertising manager.

Mr. Barrows was formerly connected with Norge Division Borg-Warner Corporation for 16 years, the last ten of which he served as assistant advertising manager. His background also includes advertising agency and newspaper experience.

The appointments were made as a part of the company's current plans for expanding sales.

● Tappan Stove Co., Mansfield, Ohio-William R. Mabee, plant superintendent, has been elected vice-president and assistant general manager of the firm.

Mr. Mabee, who is also a member of the board of directors, has completed 23 years with Tappan. Joining the firm in 1927, he worked in the accounting department for one year and two years as a clerk in the payroll department. In 1930 he was assigned as production clerk where he worked for four years before becoming production manager in 1934.

He was named assistant superintendent in 1940 and appointed plant superintendent in 1945.

 Rockwell Manufacturing Co., Pittsburgh -L. A. Dixon, Jr. has been named assistant vice-president of Meter and Valve Division, Rockwell Manufacturing Co., Pittsburgh. For the past two years he has been general manager, Pittsburgh-DuBois Division.

A graduate of Pennsylvania State College, he has had extensive experience in the meter industry. He is a member of American Gas Association, American Society of Mechanical Engineers, and the Engineers Club of New

Milwaukee names Mikula general sales manager

JACK H. MIKULA, an employee of Mil-waukee Gas Light Company for approximately 20 years, has been named general sales manager of the company. He will serve as assistant to B. T. Franck, vice-president in charge of sales.

Mr. Mikula, who has spent all of his working years with the gas company, is widely known in the utility business. Over a long period of time he has played an important part in the affairs of trade and technical organizations directly or indirectly related to the gas

While attending University of Wisconsin, from which he graduated in 1933 with a bachelor of science degree in civil engineering, he was employed during vacation periods by the gas company. Upon leaving the university he was given a cadet engineer's post and worked in various departments of the utility until 1939 when he was made supervisor of refrigeration service and installation.

Later Mr. Mikula served as refrigeration engineer in the commercial sales department; industrial engineer in the industrial and commercial department, and assistant manager of the industrial and commercial department.

He is a member of Industrial Processing Committee, American Gas Association, and of Industrial Sales Committee, Wisconsin Utili-

ties Association. Mr. Mikula is also immediate past-chairman, Milwaukee section of American Society of Refrigerating Engineers. He holds memberships in Wisconsin Society of Professional Engineers, Midwest Industrial Gas Council, American Society for Metals, Engineers Society of Milwaukee, and other technical organizations.



J. H. Mikula

ISSUE OF JULY-AUGUST, 1950

Smith elected at Canadian gas convention

THE COMMUNITY of interests, aims and problems existing between the Canadian and American gas industries was the focal point of the highly successful forty-third annual convention of Canadian Gas Association. More than 300 delegates from all parts of North America attended the meeting held June 20-23 at Murray Bay, Quebec.

Hugh G. Smith, secretary, Consumers' Gas Co. of Toronto, was elected president for the 1950-1951 term. Other new officers are: first vice-president—R. M. Perkins, manager, Windsor Gas Co., Ltd.; second vice-president—Raymond Latreille, commissioner and

Associated organization activities

manager, gas division, Quebec Hydro-Electric Commission, Montreal. George W. Allen continues as executive secretary and treasurer.

Opening the convention, Charles M. Sieger, Hamilton, president of Canadian association, presented an optimistic picture of the Canadian gas industry, with particular reference to the expanding natural gas branch. Over-all progress of the American gas industry was cited by Clifford E. Paige, president, The Brooklyn Union Gas Co., and a past A. G. A. president, who delivered a paper prepared by Hugh H. Cuthrell, A. G. A. president. Pointing to the 24 million customers served, a 34 percent increase in the past 10 years, and mounting sales and revenues, Mr. Paige said the gas industry is experiencing record expansion. Sparking this upward swing, he said, is the farflung PAR Plan which is benefiting every branch of the industry and the public.

Hall M. Henry, vice-president, NEGEA Service Corp., Cambridge, Mass., gave a fact-filled and timely analysis of the manufacture and economics of oil gas. High Btu oil gas processes, he said, are a practical answer to many problems of rising operating costs.

A strong promotional flavor was injected into the meeting by two U.S. speakers: F. X.

Mettenet, vice-president, The Peoples Gas Light & Coke Co., Chicago, and Frank W. Williams, American Gas Association. Mr. Mettenet spoke on the functions and scope of a utility sales department, while Mr. Williams gave an inspirational sales address eatitled "Cut Yourself a Piece of Cake."

Fundamentals of galvanic corrosion were described by A. B. Lauderbaugh, chief gas engineer, The Manufacturers Light & Heat Co., Pittsburgh. Rounding out the program, J. Clifford Adams, Central Ontario Industrial Relations Institute, traced the growth of pension programs, and Mrs. Kate Aitken, noted radio commentator, told how "The Women Hold the Purse Strings."

A special meeting of the CGA Manufacturers' Section held the opening day featured an address by H. Leigh Whitelaw, managing director, Gas Appliance Manufacturers Association.

Many delegates took advantage of the 550mile boat trip arranged for the conventioners. There was also a large attendance at the annual banquet and the president's reception which were highlights of the program.

The next annual CGA meeting will be held at Bigwin Inn, Lake of Bays, Muskoka, Ontario, in June 1951.

Promotion keynotes GAMA annual meeting

EXPANSION of sales effort to meet vast new competitive drives was the keynote of the four-day annual meeting of the Gas Appliance Manufacturers Association held May 27-30 at White Sulphur Springs, West Virginia. While gas appliance sales are sharply up over last year, the long-term outlook is one of intense competition, speakers indicated.

Frederic O. Hess, president, Selas Corp. of America, Philadelphia, was elected president, succeeding Stanley H. Hobson, president, Geo. D. Roper Corp., Rockford, Illinois. Other officers elected, all of whom take office in October, were: first vice-president—Louis Ruthenburg, Servel, Inc.; second vice-president—A. B. Ritzenthaler, Tappan Stove Co.; treasurer—Lyle C. Harvey, Affiliated Gas Equipment, Inc., and secretary—H. Leigh Whitelaw.

National advertising by the gas industry needs support at the local level by distributors, dealers and other outlets, President Hobson told the delegates. "Without complete tie-in of brand name advertising at the local level, through gas utilities and dealers alike we lose the real wallop that national advertising should create."

Hugh H. Cuthrell, president, American Gas Association, and vice-president, The Brooklyn Union Gas Co., called for stepped-up cooperative efforts to match competitive programs. "We must pool every possible resource," he said, "dollars, ideas, technical skills, and utilize our national associations to infuse them into the body of the industry on a national scale."

In a series of provocative questions and answers, H. Carl Wolf, A. G. A. managing

director, gave his viewpoint on current sales roadblocks. Among them he cited the tendency of gas utilities to build a protective crust around the consumer which has discouraged direct contact between manufacturer and consumer. Likewise, he noted, the manufacturer has directed all too much sales effort at the utility and dealer, "leaving them to plow the ground for consumer acceptance." He urged reorientation of our sales efforts.

Lee A. Brand, vice-president, Empire Stove Co., and chairman, National Committee for LP-Gas Promotion, stressed the greatly enlarged LP promotional program now under way. He called it "the biggest single job ever tackled by the LP-gas industry."

The 1950 census data will provide a gold mine of market information, Philip M. Hauser, University of Chicago, and past Acting Director of the Census, told the GAMA members. "It will enable you to compare your own actual sales with sales potentials in the richest markets in the world," he said.

Other speakers included: W. W. Wyatt, general council, National Committee for Repeal of Wartime Excise Taxes, and James C. Olson, Booz, Allen and Hamilton.

Various GAMA divisional meetings were held the mornings of May 28-30.

GAMA now has 580 manufacturer members, 20 of whom were added in the last two months, Managing Director Whitelaw reported.



Newly elected officers of GAMA with President Stanley H. Hobson: (Left to right) A. B. Ritzenthaler, Tappan Stove Co., second vice-president-elect; Frederic O. Hess, Selas Corp. of America, president-elect; Mr. Hobson and Louis Ruthenburg, Servel, Inc., first vice-president-elect

Last Call for PCGA convention

THE stage is set for the fifty-seventh annual convention of the Pacific Coast Gas Association. Top-flight authorities on all phases of the industry will take part in the program July 31-August 3 at the Hotel Olympic, Seattle.

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ke." on were N. Henry Gellert, president, Seattle Gas Co., and PCGA president, will preside at the general sessions. The comprehensive program has been arranged under the chairmanship of William C. Mainwaring, vice-president, British Columbia Electric Company. R. W. Todd is chairman of the Technical Section and J. I. Hall, chairman of the Sales and Advertising Section.

Keynote speaker at the first luncheon session, Tuesday, will be Ernest C. Manning, Premier of Alberta. Mr. Waring's address will be of particular interest because of the great natural gas fields now being developed in Alberta. The convention opens Monday with a dinner meeting featuring a dramatic presentation of the domestic uses of gas.

Tuesday's general session will feature addresses by President Gellert, Hugh H. Cuthrell, A. G. A. president, and Stanley

H. Hobson, GAMA president. Featured speakers for the afternoon session are: George F. Mitchell, president, The Peoples Gas Light and Coke Co.; Harry K. Wrench, Minneapolis Gas Co.; and Owen Clarke, chairman, Washington Public Service Commission.

Following a boat trip to Victoria and the President's Reception on Wednesday, the final



N. H. Gellert R. W.



R. W. Todd



J. L. Hall

general session will be held on Thursday morning. Headlining this session will be the premiere of the Pacific Gas and Electric Company's motion picture, "The Super Inch." Speakers include Hall M. Henry, NEGEA Service Corp., Cambridge; and Joseph Muckley, vice-president, Seattle First National Bank.



Laurence O. Secord

acting director of the gas appliance promotion division, Ketchum, MacLeod & Grove, Inc., advertising agency in Pittsburgh, died on May 29 following a heart attack. He was 46 years old.

In addition to doing sales promotional work among gas appliance dealers in Pennsylvania, West Virginia and Ohio, Mr. Secord was editor of the division's monthly publication, "Gas Appliance Dealer."

Frank P. Lamb

superintendent of distribution, Washington Gas Light Co., Washington, D. C., died suddenly at his home in Chevy Chase, Md., on June 6. He was 49 years old.

A graduate of University of Pennsylvania, Mr. Lamb had served with Washington Gas Light Company since 1942. He was originally assistant production superintendent and had been distribution superintendent since March

Prior to moving to Washington he worked with Allentown (Pa.) gas company as a cadet engineer. He later became a chemical engineer for Consumers Gas Co., Reading, Pa., and for a time was connected with Pennsylvania Public Utilities Commission. Mr. Lamb was also a member of American Gas Association.

Mr. Lamb is survived by his wife, Mrs. Elizabeth S. Lamb, one daughter, Betty, four sons, Neil, Jack and Joseph, all of Chevy Chase, Md., and Harry, of Ubly, Michigan.

O. C. Waters

assistant chief engineer, Atlanta Gas Light Co., died May 27 at his home in Avondale Estates, a surburb of Atlanta, Ga., after an illness of several weeks. He was born in Davisburg, Mich., and attended University of Michigan.

Mr. Waters joined Consumers Power Company in Michigan in 1921. Subsequently, he was with Jacksonville Gas Company in Jacksonville, Florida. He became associated with Atlanta Gas Light Company in 1929 and has since had several responsible positions.

Widely known as a gas engineer, Mr. Waters served on various important committees of American Gas Association and Southern Gas Association.

He is survived by his wife, and his son, Richard M. Waters.

Thomas V. Flynn

superintendent of the street division, The Philadelphia Gas Works Co., at the time of his retirement in April 1948, died on Friday, June 16, after a brief illness. He was an active member of American Gas Association and Pennsylvania Gas Association and had served with the company in various capacities since 1903.

Mr. Flynn is survived by his wife, Mrs. Margaret Flynn, and two children, Mrs. Edward A. Krupa and Thomas V. Flynn, Jr.

Burgess Manchester

who completed 30 years of service with Metropolitan Utilities District, Omaha, Neb., in March 1950, died May 25 of this year at the age of 57. Illness caused him to retire from active duty in November 1948, but he was retained as consulting engineer for the district until his death. Mr. Manchester for a number of years was a member of the Managing Committee of the Technical Section (now the Operating Section), American Gas Association.

He received his BS degree in civil engineering from Rensselaer Polytechnic Institute. His business career included service with Koppers Co., and later duty with Ford Bacon and Davis as a consultant of gas plants throughout most of the country. Mr. Manchester joined Metropolitan Utilities District in 1924 as assistant to C. D. Robison and became operating engineer when Mr. Robison retired.

Surviving are his wife, Margery, two daughters, Mrs. V. C. Dworak, Minneapolis, Minn., and Mrs. Arlo Wirth, Dunbar, Neb., and two sons, Jack, Wilmington, Del., and Miles, Pleasantville, Iowa.

Edwin S. Webster

co-founder of the engineering, investment and utilities management firm of Stone & Webster, Inc., died at his home in Newton, Mass., on May 10, 1950. He was 82 years old.

Mr. Webster organized the firm in 1899 with the late Charles A. Stone, a close friend and classmate at Massachusetts Institute of Technology, from which they were graduated in 1888. Construction and engineering work undertaken by the company has aggregated more than \$2 billion since it was organized.

Stone & Webster, as it was then known, was the predecessor of the present Stone & Webster, Inc., with offices at 90 Broad Street, New York, and at 49 Federal Street, Boston.

Surviving are his wife, Mrs. Jane Hovey Webster; two daughters, Mrs. Henry P. U. Harris and Mrs. Richard Harte, and a son, Edwin B. Webster Jr.

Otto Reiner

assistant general manager of the gas division, Public Service Electric and Gas Co., Newark, N. J., died at his home in East Orange on June 8.

Mr. Reiner was graduated in 1910 from Rutgers University with a degree in mechanical engineering and began his career with the utility as a cadet engineer.

After World War I, he returned to the company as division engineer in Passaic, became general superintendent of gas distribution in Newark in 1944 and assistant general manager in 1947.

Mr. Reiner was a member of Society of Gas Lighters, American Gas Association and New Jersey Gas Association.

Surviving are his wife, Mrs. Ray Seaman Reiner; two daughters, Mrs. Edward W. Clark and Miss Caroline Reiner; a brother, Harry V. Reiner, and a sister, Mrs. George Alsopp.

Gas predicted as No. 1 fuel for home heating

GAS will "one day" become the most economical and widely used fuel for central heating, succeeding today's other widely used fuels as the number one home heating product of the nation, R. S. Rheem, president of Rheem Manufacturing Co., predicted last month at a press conference in the Waldorf-Astoria. Mr. Rheem said ease of delivery, operation and servicing were three main reasons for the prediction.

The Rheem company's confidence in the future of gas heat can be seen by "our recent \$600,000 investment in the gas heating business," he said. The fund is being used to double the capacity of the company's Chicago plant, which produces residential gas heating

equipment. Sales of this type of equipment in 1950, Mr. Rheem said, should total about \$50,000,000 for the industry as a whole.

Reporting a \$4,250,000 plant expansion and development program for the company, Mr. Rheem revealed that funds had been procured from the Bank of America through a \$5,000,000 long-term 3 per cent loan.

Natural gas_

(Continued from page 22)

(4) Public cooking schools, conducted by our own home service representatives, where the quality features of gas cookery are stressed rather than the trade brands of the food and materials used.

(5) More advertising with better and stronger copy for the mass education of our customers. However, it is our firm belief that advertising alone cannot successfully combat electric competition.

Along with the above, we are at all times featuring campaigns encouraging our employees to purchase our latest appliances at reduced prices.

Let's digress for a minute. Since your greatest growth will come from house heating, give serious thought as to whether you as a company should sell house heating or leave the sale and installation of such equipment to the deal-

I would not sell heating equipment let the dealer do it. Help him, however, but have your sales force concentrate on the sale of ranges, water heaters, refrigerators and clothes dryers (the yeararound base load equipment on your lines). I know there will be much difference of opinion on this point, but in doing this you will not have acquired an unbalanced sales organization or a topheavy appliance installation and service department. Then the problem of the surveying, selling, financing, guaranteeing, maintenance, servicing and inventories will be the problem of the dealer. You will be free for such periodic base load campaigns as you see fit.

Practically all companies in the Eastern area that have changed over to natural gas (except Washington, D. C.), have had to keep restrictions on house heating.

Consequently, I suggest that for a while you limit your house heating sales to one or two-family dwellings. At least limit the sales to a certain number of jobs in certain areas, or to jobs of less than 500,000 Btu per hour input, etc., until you know where you stand and what you have to cope with.

Require special house heating applications. Classify these—give formal approvals. Mail two copies of the approval to applicant, and require the dealer or installer to mail to you one of these copies upon completion.

Look out for, and by some means limit or restrict, applications for poor load factor commercial heating only—by stores, office buildings, hospitals, hotels, etc. Remember, if you take on much of this load, you will at some later date be required to replace mains in downtown streets, and this will be expensive.

Also, don't get caught taking apartment heating only, with no base load. Churches, where the heating load is off peak, are good loads. Small process boilers such as in dairy milk sterilization, etc., are also good loads.

Don't oversell

Public service commissions are apt to be anxious that you take on all possible applicants and loads, regardless of size and kind, to avoid discrimination. But once the loads are on, the commission will be after you just as quickly, if such loads result in any poor pressure complaints that may be reported to them. They will require the fixed capital improvements necessary to rectify the condition, so go slow.

Do not overs: Il house heating right up to your limit of rendering good service. Better, sell fewer house heating jobs and render over-all good service. Don't advertise the sale of house heating until you are certain you can cope with the conse-

It is only natural that you may expect all the house heating equipment and large volume gas equipment people to light on you like a hoard of locusts. Look out too for the "fly-by-night" dealers who will promote all kinds of off-brand equipment and bad installations. You should advertise minimum standards of heating equipment, their proper installation, hold dealer schools, and refuse if possible to serve installations that do not meet specification.

In seeking new business, other than base load and residential house heating, look out for poor load factor business such as may be found in commercial installations where there is heating only.

Study and know the economics of poor L.F. business—both its affect on your natural gas pipeline cost and your plant and peak shaving cost, so that you may intelligently weigh any load against the net profit.

Solicit sales of industrial gas on an interruptible basis—not on a firm basis. These industrial plants now have other fuels. Insist that they be kept for standby. Be fair with these customers and next winter, if you start them right, they will be a valuable offsetting balance for your peak house heating demands.

Take on good new business that will, (for some time at least), not require additional fixed capital expenditure. Avoid low margin of profit business today, if it is going to cost additional fixed capital money in only a few years. And while you are eagerly seeking and taking on new large volume business, don't be neglectful and lose base load.

Don't be in a hurry to cut rates, either in the house heating or any other block.

This may be an excellent opportunity to change your rate structure, both as to style and blocks as well as price. In the redesigning of your rate structure, it is most important to study how to use the public demand for house heating to hold your base load.

In heating new homes and apartment buildings, where the base cooking load goes electric, you will be rendering a peak load service at rates computed on an average use basis. This, naturally, is not good business.

Special preferential, inducement or promotional type rates, and/or rates de-

signed with higher minimum bills or fixed charges, with or without a certain amount of base load-free gas included, would encourage such house heating-only customers to use . . . yes, will practically economically force them to use, gas for cooking, water heating and refrigeration. This is just what we want.

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I believe that you should capitalize on this advantage that you will have in the public demand for gas house heating. Use such a leverage where and when possible. This is most important—do something now, while you can.

Before you cut any rate too deep, remember that you do not know for sure just what your future costs for additional gas may be. Rates, once lowered, are almost impossible to raise.

As an example, the veto of the Kerr bill may, in the future, make it more difficult for pipeline companies to buy gas at present going prices to supply markets such as yours may become. Therefore, I would be interested in selling fewer Mcf for more money per Mcf rather than more Mcf at less money.

Also, remember that increased sales will sooner or later cause increased fixed capital investments on which you will have to earn additional net. So, don't get so excited over the increasing net income of your business that you become blind to any long-term, unhealthy sales trend.

You executives who are not primarily distribution or operating men must know about some of the operating conditions that will affect your ability to retain present base loads, to obtain new business, and to continue to render good service. Take a keen interest in all the natural gas problems of the other departments of your company. By so doing, you can do a better job of selling and have a better understanding of the effect of certain sales and loads on the operating expenses and net of your company.

Some manufactured gas companies that have gone to natural gas, have set up a "distribution design department" so that the distribution system at all times will be ahead of the load or demand. It is much better to get your distribution system ready for each coming winter load (in a systematic manner) rather than to be spending each summer endeavoring to correct the poor pressure conditions of the previous

A good suggestion is to mount largescale distribution maps and plot or pin thereon the house heating applications as received and approved. Plot them by size and kind to show what is happening to your loads and to your distribution system. Fortunately, manufactured gas companies generally have large diameter mains with good distribution capacity. Nevertheless, you should know what is happening on your system.

Later on, dead end mains will need to be tied in and booster type regulators may be required to handle the early morning heavy house heating peak demands.

The use of dry natural gas, and the higher velocities encountered with house heating peaks, may later on produce dust trouble. Consideration should be given to installing dust filters on new appliances and pilot lines.

Quite naturally, changes or changeovers should be made in the summertime

Be careful that the operating department does not odorize too heavily at the start—it may accelerate the sale of electric ranges.

Determine percentage

The percentage of the various gases in the mixture for distribution on peak winter days must be determined ahead of time to insure that appliances will perform satisfactorily. Know the limitations of your mixtures, and stay within them to minimize serious appliance complaints.

Distribution systems in new growth areas naturally should be designed for a potential high saturation of house heating.

I would start now laying out a fiveyear estimate of your gas requirements and how you plan to meet these demands. This is a sales department job. Make up the last actual year and the next two years by monthly requirements. Follow up then with three years by the annual amount. Also, list for each of these five years, your estimated peak day requirements and the source gases to meet them. All estimates should be based on weather bureau monthly mean and daily minimum mean temperatures.

Some natural gas and mixed gas companies make up a table of weather probabilities by months showing the number of days in each temperature block and the corresponding 9 AM temperature. This is to determine early in the day, the probable load, the percent

mixture ratios required and the need and extent of peak shaving. Knowing this information early in the day insures uniformity of your gas sendout throughout the day so that all appliances will operate satisfactorily. Remember your public relations—you must render good service!

So that you may know just what equipment and loads you have on all parts of your system, why not make or bring up to date, a customer appliance survey. This will help you to make better estimates and will give you a bench mark from which to start making future comparisons.

Determine your present, and estimate your future customer usage factors-for the residential base load, central fired house heating, incidental heating, industrial and commercial loads. Keep a record of actual sales vs estimates, correcting the actual each month for the deviation from the normal mean temperatures. Experience has shown that companies going to natural gas are apt to underestimate their future requirements. You must be prepared to make accurate estimates if you expect the pipeline companies to prepare properly to meet your anticipated loads.

Remember that you do not have the ability to meet your winter-time peak demands from underground storage of natural gas received the previous summer, as we can. Any poor L. F. business must be taken care of either by buying gas from the pipeline company at a poor L. F. (with its high demand charge), or by increased peak shaving, or both. And both are expensive.

I intentionally am making no comments on the physical problems of any changeover (both as to plant and distribution system). They are generally well known, but any resulting operating conditions of poor pressure, poor mixture, dust, over-odorization, etc., will have a material effect on your base load appliance sales and general customer reactions.

You who are about to receive natural gas are going to have a very interesting and profitable experience. Do not think for one minute, however, that the receipt of natural gas in small and later on large doses will, in itself, cure all of your ailments. It will not scare one bit of competition from the door. It is not so with us. I am sure that it will not be so with you!

A. G. A. nominates_

(Continued from page 4)

For vice-chairman

RALPH F. McGLONE, assistant commercial manager, The East Ohio Gas Co., Cleveland, Ohio

Industrial and Commercial Gas Section

For chairman

CARL H. LEKBERG, staff supervisor, industrial gas engineering, Northern Indiana Public Service Co., Hammond, Ind.

For vice-chairman

RONALD A. MALONY, executive vicepresident, The Bridgeport Gas Light Co., Bridgeport, Conn.

Laboratories Managing Committee

For chairman

ARTHUR F. BRIDGE, president & general manager, Southern Counties Gas Co., Los Angeles, Calif.

For vice-chairman

C. E. BENNETT, president, The Manufacturers Light & Heat Co., Pittsburgh, Pa.

Manufacturers' Section

For chairman

W. REED MORRIS, consultant, Koppers Co., Inc., New York, N. Y.

Operating Section

For chairman

R. VAN VLIET, general superintendent, New York & Richmond Gas Co., Stapleton, S. I., N. Y.

For vice-chairman

H. BRUCE ANDERSEN, vice-president in charge of distribution, The Philadelphia Gas Works Co., Philadelphia, Pa.

Publicity and Advertising Committee

For chairman

CHARLES J. ALLEN, vice-president, The Connecticut Light & Power Co., Waterbury, Conn.

For vice-chairman

HOWARD A. PRAEGER, manager, publicity & advertising department, The Brooklyn Union Gas Co., Brooklyn, N. Y.

Residential Gas Section

For chairman

CARL H. HORNE, vice-president, Alabama Gas Corp., Birmingham, Ala.

For vice-chairman

W. J. SCHMIDT, general sales manager, Long Island Lighting Co., Mineola, N. Y.

Modern "rib"_

(Continued from page 24)

fact that she did not know that she needed to use a 25° lower temperature when using a glass baking dish. Or the failure may have been due to some other similar factor, such as lack of bright shiny pans, that had nothing to do with the range except the customer's own lack of knowledge. Unfortunately, she doesn't blame the mix or herself; she blames the range.

From this we see that there is a whole group of women wide open to time-saving, load-building suggestions. We couldn't ask for a better audience for our story—if we get the right story. There are endless opportunities to step in with the answers to their questions, and from there to go on to sell and resell the ideas home service wants to get across.

National advertising, using all the means available, does a splendid job of creating the desire and promoting the sale of new and desirable equipment and methods. But because of the wide choice available, this does tend to make it harder for the homemaker to make up her mind. She not only has to use good judgment in shopping, but she reluctantly has to try out these new products.

Our homemaker is going to have to decide whether or not she will continue to use her conventional washer and buy a gas dryer, or whether she should have

an automatic washer and still hang her clothes on the line to dry. Because of these factors, her lack of knowledge, and the fact that she is much more careful of the way she spends her money, today's homemaker wants help in buying.

By helping the advertising and selling departments, home service can steer these confused buyers into wise choices. The actual sales are made by the local dealer and the utility, and home service can thus materially aid this selling.

Many home service girls never like to think of themselves in the role of laundress. However the last year has made it very apparent that we must know all there is to know about laundry work.

Real selling job

Manufacturers of laundry equipment have done a real selling job on the drudgery of washday. But, they've done something else too. By glamorizing their products and making women want them, they have dignified the job of washing, even to the extent that women will do the laundry in the kitchen. Manufacturers of laundry products have recognized this whole new phase of home laundry work and have put on the market products to give that professional touch to home laundered clothes. The fabric manufacturer has recognized this by putting out an array of cotton fabrics that do not require ironing-a natural for the drver.

The real justification for a laundry program in the home service department is to promote and sell hot water—140° hot water—and gas dryers. Hot water is basic not only to the woman doing laundry work and dishes, but to the gas company's business.

The rate of growth in a home service department is shown by the fact that one activity leads to another. Because we have been discussing the *wby* of expanding home service activities, we haven't said very much about the *how* of doing it. However, here is just one way that has been used to get new ideas across to the homemaker—use of a tried and true home service tool, a tested selling device, food demonstrations.

Most of us like to give demonstrations. We know the women like them. Therefore, we must adapt their use to fit the needs of our present day homemakers who no longer wish merely to be entertained or win a prize. They have definite needs for information. The homemaker herself doesn't realize how great this need is.

We must overhaul our demonstration techniques. We must reevaluate their purpose, their content. For instance, we encouraged every member of our home service department to enter the CP range contest. Each demonstration was given before a group of salesmen and all too often the emphasis was placed on "how to do" rather than on benefits received.

At the A. G. A. Home Service Workshop in January we learned of a new method of washing blankets using 140° hot water and the automatic clothes dryer. We convinced ourselves that it was a good idea, by trying it, and then decided to show it to the women. In order to get this story across, we coupled it with a demonstration on yeast doughs. We had a large audience which left completely sold on this method of washing blankets. Many of them for the first time heard the hot water story and saw a gas dryer in operation.

Here then is an easy way we can be of service in helping the women to get more use from their equipment, save time, get better results, and promote load building appliances. Again, our story of educate,

promote and sell.

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Just as you can stretch a rubber band, so can you stretch home service. The demonstrations, home calls, community contacts, and the many other services which were developed primarily to educate the customer must continue to be used; but they alone are not enough. A program can be good only so long as it has elasticity and resiliency to meet company needs. You must be able to stretch it to incorporate new things to meet changing conditions.

We must expand our thinking so that we can look at the job objectively and see if we are really rendering the service to the company and the homemaker that we

think we are.

Sales executives and management have a definite responsibility to their home service program. First, the home economist, as a rule does not have too much selling background. If they are to be used effectively in this intensified selling program then some one must take the time and the interest to help train the home economist in the fundamentals and techniques of selling. She needs constructive help in evaluating that part of her program.

For instance, is she really selling the benefits of her service in a demonstration? Has she learned that the emphasis goes on what the range will do rather than stressing the how. She needs to be taught effective selling. Some intelligent direction of sales activities with greater integrations of the program would result in more of this effective selling.

Just as a sales program and promotion activity is carefully plotted, so too must a home service program be planned. Just

as a customer has to be educated, so too does home service have to be educated, trained and alerted to these changing needs

Any way you look at it, home service can render some sort of service to every customer, regardless of age, finances and interests.

Take the case of the irate customer who comes in and complains that her range is not operating correctly. To take a typical example, she would be a customer who has not purchased the range through the utility or has had no contact with the utility. Because it is the job of the home service girl to work with this customer, she can find out what her difficulties are -whether it is the range itself, the way the customer is using the range, or because of the customer's attitude. Having satisfied the customer by taking care of whatever is bothering her, the home service girl establishes a feeling of friendliness with the customer. As a result she may bring the customer in either to a demonstration or make her aware of the telephone service or offer her one of the varied services available. The customer is conditioned to the education, promotion and selling program of the home service department.

Render a service

Here is another example. Perhaps the customer has attended a demonstration. The germ of an idea that she needs a new gas range is implanted in her mind. She comes in shopping. She is sold a range and the home service girl contacts her again when she makes a home call on that appliance. We might truly say that home service goes around in circles, because at any point at which we contact the customer we can if we wish make a full circle back to that customer.

We could go on and on and use many different illustrations that would point up this whole thing that home service is in the position of being able to pick up a customer at any point and to render a service that will lead her on from one stage to another. We might almost say that home service meets the customer on a horizontal level, moving around with her to meet her needs.

Home service can be used to help knit sales and service departments more closely. You can't have one without the other. Because we know what goes on in the customer's home, home service can be a go-between for these departments in solving many problems.

Likewise, home service can be the gobetween for the customer and the manufacturer. The food manufacturer who wants help on a new food product can take advantage of the knowledge home service has about the homemaker to find out what her likes are. The success of this product means additional load for the gas company from this commercial user.

Or a customer may complain that a piece of equipment is not operating properly. Home service has an obligation to report it, but they also have the obligation of finding out what some of the difficulties are. The opportunity to work with the A. G. A. Laboratories has been of tremendous value to the girls in home service.

The education, promotion and selling that we have done with the homemaker might well be applied to changes in policy set up by management. In the conversion from manufactured gas to natural gas there may be a need for some of these same techniques that have been used on the outside.

Every department in a company has a definite responsibility to management, but it seems to me that home service has rather a special contribution to make. Home service can and must keep management informed of the trends in the home and the attitudes of our homemakers. Though the man of the family may pay the bills, it is the homemaker, the woman of the house, who uses the service most and who must be sold and satisfied. Meeting her on the common ground of the laundry or the kitchen, the home service girl gets first-hand reactions. Home service reports to management should spell out these trends and attitudes.

Regardless of the state of your health and that of your company, home service, taken in the right quantities, internally and externally, can help to make happier, more satisfied customers. All this can be done to the ultimate satisfaction of management.

Lone Star finances

ONE STAR GAS CO., Dallas, Texas, on June 9 concluded a loan of \$85 million to be used to retire debt and help finance a five-year expansion program totaling more than \$81 million. Twelve leading financial institutions participated in the loan.

D. A. Hulcy, president of Lone Star and vice-president, America Gas Association, described the loan as "probably the largest single financial transaction ever closed in Texas." He also called attention to the fact that the company is experiencing the greatest period of growth in its 41-year history.

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(Continued from page 17)

pitiful seasonal load factor which afflicts our industry is a possibility to which our best planning and efforts must be applied vigorously and at once!

It seems reasonable to expect that the air conditioning load of the present and near future will come principally from commercial and industrial applications, in point of tonnage. However, emphasis and effort to extend its residential use will continue to be fruitful and attractive from the revenue viewpoint. Nearly everywhere in the United States the summer cooling function of air conditioning is established and accepted, and the load promises to be far more nearly uniform than its winter heating function. This arm of gas service, therefore, is of much more general concern than has been thought. In only the areas near the Canadian border-and in not all of those-can this load-building potential be ignored by gas utilities without doing themselves an injustice.

As has been put forward, gas air conditioning is a profit-maker for the electric utility as well as gas, and better and more economical operation can be obtained from gas air conditioning equipment. It is certain that in natural gas areas, with commercial gas at 5-6 cents per therm and commercial electricity at two cents per kwh, a gas system can be operated for 1/3 to 1/2 less than the cost of operating an electric system of identical capacity. In manufactured gas areas the margin is less apparent, and special rates may be necessary for comparable customer savings, but such adjustments during the off-peak season are all gain and no loss.

Commercial customer-acceptance is largely a matter of dollars and cents.

Success

● Addressing the New York Daily Mirror's sixth annual youth forum, elder statesman Bernard Baruch listed his recipe for success:

Be polite, prepare yourself for whatever you are asked to do, keep yourself tidy, be cheerful, don't be envious, be honest with yourself so you will be honest with others, be helpful, interest yourself in your job, don't pity yourself, be quick to praise, be loyal to your friends, avoid prejudices, be independent, interest yourself in politics, and read the newspapers. As I noted before, commercial air conditioning is an item of business expense, more and more generally admitted as indispensible and therefore more and more a matter of economics. The gas utility which seeks to lift its summer load has the answer in its own hands.

Today we face the future with millions of dollars of research, testing and experimentation behind the manufacturers of gas air conditioning equipment. What is at hand today, and what is forecast for the future?

Consider first the equipment of the several manufacturers.

Williams says:

"A new unit has been designed for our re-entry into this market. It has been our purpose to take advantage in our redesign of our experience over a great many years with approximately 2,500 tons of equipment of this type. The objective has been that of designing and manufacturing a unit which would permit better manufacturing control and cost and at the same time offer to the distributors and dealers equipment which could be handled, installed, and maintained most economically.

"Our tests to date have been most satisfactory, but certain changes have been suggested which will further improve the unit. Accordingly we have deferred our production schedule for one year and will proceed with controlled field testing during the coming cooling season. Therefore, we will not have Air-O-Matic to offer to the industry as a sales item in 1950.

"The unit which we have developed is of nominal ten-ton capacity and is complete with the water chiller. It incorporates the same principle of operation as our former equipment but requires no field installation other than the connection of steam, condensing water, ice water, and electricity.

"Our plans contemplate the production of similar units slightly larger of 15-ton capacity. The equipment works very satisfactorily in multiples. One of the test units will be submitted to the A.G.A. Laboratories for complete inspection and test. Their findings will be available before production starts."

In substance, therefore, Williams Air-O-Matic equipment is expected to be available to build this load for our industry next year, or perhaps later.

Surface Combustion Corporation has

available today for the market its Kathabar equipment, providing humidity control usable in conjunction with air-cooling and heating by other means. The gas load arises in regenerating the Kathabar unit, and its summer load for humidity control alone averages about 70 percent of winter heating tequirement for the same area. Equip. ment is available and applicable for all areas, from the smallest to the largest In Houston there is a connected load of gas supplied to Kathabar units amounting to about 30 million Btu, or 300 therms per hour. This prominent manufacturer, through continued research and testing, expects to continue to emphasize its superior qualities of humidity control and its "freshness" appeal, to be utilized together with air conditioning and heating equipment.

Absorption units

Carrier Corporation has available absorption units in capacities of 115, 150, 200, 270 and 350 tons. It is of simplified design and high-grade performance, operating at very low fluid pressure within the refrigeration cycle. This equipment is for operation with either high or low pressure steam. Its operating weight is about 85 pounds per ton for high pressure, and eight percent more for low pressure.

From a single 150-ton unit, with gas at 2½ cents per therm, annual revenue should be \$1,125 for 1,500 hours of operation. This would be 12 hours daily for 125 days, or approximately 4 months, and the annual revenue in the South and Southwest would be considerably higher.

This equipment costs but little more than conventional motor-driven compressor equipment of similar capacity, but its operating economy is substantial an advantage for both gas and electricity. Absorption machines are lighter in weight. Their freedom from vibration also assures satisfactory installation in the attic or on the roof, with resulting building economy. The biggest jobs are now our market as well as the small shop or office building, and the gas industry needs to realize the far-reaching effect upon its revenues this great new tool will have, if we use it.

Servel now offers equipment in single and multiple units from three-tons to 20-tons capacity. This utilizes the

absorption cycle and is based upon their experience from more than 6,000 installations made since 1939 in residences and small commercial establishments. Their three and 5-ton units are standard. Recently an "incremental assembly plan" has been devised, combining refrigeration components grouped around a central housing which handles the total conditioned air with a single filter element, blower, and control system. This enables Servel equipment to serve where only summer air conditioning is needed and other satisfactory heating equipment is present. It greatly broadens the market previously opened to its single-unit, dual-purpose installation.

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Servel also has a 20-ton air conditioning unit in the design stage in its laboratory. Production is expected in early 1951, and, when added to the current line of Servel products, will give the gas industry adequate coverage of those commercial and industrial markets requiring capacity up to and including 80 tons. This equipment is of the familiar absorption type and operates without moving parts to produce a highly satisfactory form of air conditioning service.

A bow must be made in the direction of the turbine-driven centrifugal compressor refrigeration units of Carrier Corp., of which some 600, of 100 tons and up, are in operation. Steam to drive the turbine offers interest to the gas industry here, but again, the absorption equipment offers the greatest gas load-building potentialities. Gas-driven power units to drive the conventional compressor equipment also offer a potential gas load not to be overlooked, and the "Ready-Power" packaged unit is becoming popular in this field.

Operating costs of such installations are indicated as being far less than those of electrical equipment for the same job. Since "half a loaf is better than none," we should inform ourselves of the various manufacturers of these power units and their respective advantages in order to realize some load from such installations, especially those of conventional equipment already made in which the power element has proven to have high cost of operation.

It would be presumptuous for me to attempt to discuss in minute detail the construction and operating features of the equipment I have mentioned. I do presume, however, to point out that this is an enormous field, that further occupation of it is open to us through equipment now available, with more equipment coming our way.

Gas air conditioning has come of age indeed, and is now competitive with and in many respects preferable to the conventional methods of past years. It is ready to be utilized by the gas utility industry as one of its principal sources of revenue. The cost of acquiring this business is but a small part of the revenue to be obtained from its year-after-year gas load—a cost we cheerfully accept in other and long-established gas appliances.

Public acceptance

True, the electric industry has the room-cooler, a useful appliance of limited application, and we have nothing now available to capture the singleroom load. But public acceptance has been achieved by Servel's unit, recently reduced in price and now applicable in multiples; by Carrier's absorption unit of large size, opening an enormous commercial and institutional market to us; by Surface Combustion's Kathabar, with its unique "freshness" appeal and extensive opportunities of application. Those are here now-accepted and established. We have only hope and encouragement for Williams' Air-O-Matic units promised for the future. It may be that more and better equipment will be produced and offered later by these or other manufacturers, but we have no excuse for waiting to see. Our goods are here, and our customers are waiting!

To estimate the additional revenues from this source if our customers use our goods for their own and their customers' comfort would be difficult. But I know that the cooling load for my company, per customer, is more than twice the heating load. Farther north the ratio is less, but a summer load of only 1/2 the winter load is substantial. Every ton of air conditioning adds \$20 to my company's revenues, more than 2/3 from cooling alone. The 2,000 tons we expect to add this year will bring in \$40,000 a year for a long time to come-most of it as summer load we never had before. We calculate that approximately 75,000 tons will lift our present summer valley to our winter average, and we are determined to attain it eventually.

There is a way, perhaps many ways, to sell these goods of mutual benefit. We have tried several. Architects and builders are our best salesmen and buyers, but there is no substitute for a satisfied customer. All of this seems to me to be proper material and a fitting goal of A.G.A.'s promotional program. If you really want this of A.G.A., and say so, I think you will get it.

Our gas industry's progress has always been matched by improvement and development in gas appliance production. The range, the water heater, house heating, the refrigerator. Now, in these postwar years, the manufacturers meet and match us again with the gas clothes dryer, the gas incinerator, and with the greatest unit load-builder for home and commerce yet created, gas air conditioning equipment.

They have come through with the equipment. Can we stall and delay and alibi ourselves out of additional load one single day for lack of it? We cannot. It is here. It works. It produces. We had better be here and work and produce, or else see this immense and profitable load committed to equipment from which our businesses do not get a dime, and go to a competitor, who would rather not have it if he knew the truth!

If every bit of air conditioning sold this year in the United States operated on gas, it would use 20 billion cubic feet for its summer load. The last item of equipment to be replaced in home or business will always be the air conditioning plant. This load will go on, and on, and on.

We must outsell the electric air conditioning equipment dealer and contractor through gas air conditioning equipment dealers if we can; through gas utilities if we must, until dealer representation can be obtained. Such competition should be a challenge to all our sales planning resources. It is a thing that can be done if we will to do it.

The forecast for gas air conditioning is for a horizon as wide and high as we choose to make it. In a sentence, commercial air conditioning is the greatest and most profitable class of new load-building available to the gas utility industry today—and tomorrow.

New A.G.A. members

Gas companies

Arizona Edison Co. Inc., Phoenix, Ariz. (Reid Gardner, pres.)

Manufacturer companies

A. Belanger, Ltd., Quebec, Canada (Donat Paquet, general manager)

Birmingham Stove and Range Co., Birmingham, Ala.

(S. J. Price, Jr., assistant manager) Brandes Co., Madison, Wis.

(Ernest E. Brandes, owner)

Consolidated Iron-Steel Mfg. Co., The, Cleveland, Ohio

(L. S. Cawrse, vice-president) Heating Equipment Co., Pittsburgh, Pa. (Ernst S. Jacobsen, president)

Mutschler Brothers Co., Nappanee, Ind. (R. C. Chapman, secretary)

Rochester Products Div., General Motors Corp., Rochester, N. Y.

(R. I. Hahn, director of tubing development)

T. D. Williamson, Inc., Tulsa, Okla. (T. D. Williamson, president)

Individual members

Mason C. Albrittain, Consolidated Gas Electric Light & Power Co. of Baltimore, Baltimore, Md.

A. Donald Almquist, Sellers Engineering Co., Grand Rapids, Mich.

Clark A. Bailey, Johns-Manville Sales Corp., New York, N. Y.

Leslie A. Baldwin, Johns-Manville Sales Corp., New York, N. Y.

Thomas Birch, San Antonio, Texas

Piero Verani Borgucci, Azienda Generale Italiana Petroli, Rome, Italy

Norman D. Bradley, The East Ohio Gas Co., Cleveland, Ohio

Calvin R. Carver, Public Service Electric & Gas Co., Newark, N. J.

Donald H. Davidson, Nineteen Hundred Corp., St. Joseph, Mich.

John Edward Davis, South Eastern Gas Board, Croydon, Surrey, England

C. J. Doyle, Servel, Inc., Washington, D. C. Daniel L. Drake, Consolidated Gas Electric Light and Power Co. of Baltimore, Baltimore, Md.

 L. D. Eastmead, Servel, Inc., Evansville, Ind.
 A. E. Eshenfelder, The Ohio Fuel Gas Co., Springfield, Ohio

M. W. Gaylord, Koppers Co. Inc., Gas & Coke Division, Pittsburgh, Pa.

Charles E. Gordon, United Fuel Gas Co., Charleston, W. Va. H. B. Griffith, Jr., East Tennessee Natural Gas Co., Knoxville, Tenn.

W. K. Grube, Servel, Inc., Dallas, Texas Earl V. Harlow, Koppers Co., Inc., Baltimore Willard Wellington Hodge, Mellon Institute of Industrial Research, Pittsburgh, Pa. Andrew W. Johnston, Jr., Boston Consolidated Gas Co., Boston, Mass.

Henry M. Killmar, Carborundum Co., Refractories Division, Perth Amboy, N. J.
Paul M. Kydd, Chemical Construction Corp.

New York, N. Y.

Ernest J. Liggett, Johns-Manville Sales Corp., Tulsa, Okla. John Miller, Public Service Electric & Gas

Co., Newark, N. J. Harold L. Moore, Gas Construction & Service

Co. Inc., New York, N. Y.
E. Maurice Myers, Consolidated Gas Utilities

Corp., Oklahoma City, Okla. Henry A. Nordheim, Consumers Power Co., Owosso, Mich.

Linden Stuart, Jr., Barrett Div., Allied Chemical & Dye Corp., New York, N. Y.

John C. Taylor, Michigan Consolidated Gas Co., Detroit, Mich.

Jack Van Nostrand Richards, Jr., Public Service Electric & Gas Co., Newark, N. J.

Ford R. Waugh, Eclipse Fuel Engineering Co., West Medford, Mass.

Ralph S. Wenner, The Ohio Fuel Gas Co., Columbus, Ohio

Ray R. West, Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.

Security analysts.

(Continued from page 12)

of the type of territory. Shots of power stations, gas plants, etc., don't make much of an impression unless there is some real reason brought out for including them.

Slides have some of the same objections that apply to movies. In most meetings the people in the back rows can't see all the details. This applies particularly to statistical slides.

Large statistical wall charts are sometimes used to illustrate talks, but again there is the disadvantage that only those in the front rows can see all of the chart.

Increased use is being made of statistical booklets which are handed out to the audience prior to the talk and to which the speaker refers by page number. In the first place, everyone can see the figures or chart no matter where they are seated. In addition, the audience can use the booklet for making notes as the speaker talks. Some very effective booklets have been prepared with charts on one page and the figures that make up the charts on the opposite page.

Some speakers have had copies of

their talks available at the end of the session. Copies of a speech help to prevent misinterpretations and are good reference material to be kept by the analysts. It at least might be well to have a few copies of the speech available for reporters.

Another possibility, after the meeting is over, is to write a letter to all the members of an analysts society asking any who were not able to attend if they would like a copy of the talk and the booklet.

Analysts often write to companies for information. Some of the requests are unreasonable. However, a company can get a very bad name in the financial community for ignoring letters. If a question can't be answered adequately, it might be well to explain that an officer of the company would like to discuss this matter in person the next time he calls in that particular community.

Establishing a program

It is particularly important in investor relations work to lay out a definite and continuous program. Groundwork laid over a number of years will pay greater dividends than a large amount

of effort during a securities offering.

The utility industry in general has done an excellent job in furnishing the informed investor with complete information. The only criticism which might be made is that most companies do not lay out a definite program but arrange meetings more or less on a hit-or-miss basis as time permits. For example, a due diligence meeting may largely duplicate a concurrent appearance at an analysts society.

The extent and type of program which a company should establish depends on many factors. Naturally, a large company can place more effort in an investor program than a small one. Where the company's principal investors are located and the type of investor which they represent will have an important bearing. The company's future financial requirements will have an important bearing. Its location may have an effect on which areas are cultivated.

Not only is it important to have a definite and continuous program, but such a program should be in direct charge of a senior officer. Analysts naturally wish to feel that the person with whom they are dealing can speak

with authority for the company.

Friends in the financial community, such as your service organization, a commercial banker, or an investment banker, would be glad to give guidance in setting up a program for a particular company. Some variation in the presentations is needed. A company should be careful not to overdo it in one year and thus use up too much of the available ways of getting its story across at one time.

Building a list

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A list of security analysts and financial people who should be contacted in any investor relations program should be built up gradually. The list should include people currently interested in the company and those who may become interested as the character of the

company changes.

Among the first to consider including on any list should be those in investment organizations which own the company's stock. A company should watch the transfer sheets to find out which brokerage houses are particularly interested in the stock. Depending on the type of security, the list might include analysts in brokerage houses, the investment departments of banks, investment trusts in insurance companies, in investment banking houses, investment counsel firms, etc. Mailing lists become dead rather quickly because firms merge, people die, people change jobs, etc. Therefore, it is advisable to review a mailing list once a year. One way is to send a letter with a return card asking such information as whether they wish to be continued on the mailing list, whether the material they are receiving is satisfactory, etc.

Of particular importance are three investment services in New York-Moody's Investors Service, Standard and Poor's Corporation and Fitch Publishing Company. They are important because much weight is given to the quality ratings they place on bond issues. However, they are also important because they offer some or all of the following services: manuals, current services, bond and stock quotation books and investment opinions. They should be kept thoroughly informed of a company's operations. There is somewhat of a different approach in contacting these organizations.

For example, when a utility execu-

tive wishes to contact Moody's organization, he should talk to the utility analyst who follows his company. The utility analytical department in Moody's consists of a head analyst and three assistants. The utility companies are divided among these analysts. If all of the utility executives made frequent calls on these analysts, they would have no time for analytical work, but it would be well for executives to check every so often to make sure no further information is needed. At Moody's the analysts are the ones to see, not only about bond ratings but also about stocks. Written material sent to Moody's library will be directed to the correct analyst and may find its way into the current service.

Standard and Poor's Corporation is organized somewhat differently in that there is a division between the committee which rates the bonds and the analysts which cover the companies regularly in order to make recommendations on the stock. Standard and Poor's Corporation explains the situation as follows: "A utility about to sell a bond issue, or disturbed by an existing rating, should get in touch with the rating agency and ask for a conference. At such a meeting full information could be furnished and discussed, and the rating experts would have an opportunity of asking questions which they felt would help them.

'At Standard and Poor's get in touch with Louis Brand, managing editor of Bond Advisory Services, on all bond issues, and Edward Donahue, manager of Industrial Securities Group, when stocks are involved. These people will not necessarily attend the meeting but will designate the proper analysts.'

At Fitch, either for a new offering or if you wish to check to find if they have sufficient information about your company, Erling C. Olsen, president, is the one to contact.

In summary, the job of supervision of investor relations should be assigned to a top executive. Obviously, all of the above suggestions cannot be used by one company, but a definite program for at least one year in advance should be determined, which will fit the company's particular requirements.

A well-organized program will simplify the raising of capital. It will pay off for all concerned-present stockholders, management and consumers.



1950

JULY

31-August 3 Pacific Coast Gas Association, annual meeting, Hotel Olympic, Seattle, Wash.

17-18 •SGA Home Service Workshop, New Orleans Public Service Inc., New Orleans, La.

SEPTEMBER

8 •New Jersey Gas Association, annual meeting, Monmouth Hotel, Spring Lake, N. J.

14-15 •Mid-West Gas Association, gas school and conference, Iowa State

College, Ames, Iowa

18-20 • A. G. A. Accident Prevention Conference, Wardman Park Hotel,

Washington, D. C.

22-23 Maryland Utilities Association, Fall Conference, Cavalier Hotel, ginia Beach, Va.

OCTOBER

2-6 • A. G. A. Annual Convention, At-lantic City, N. J.; GAMA Exposi-tion of Gas Appliances and Equipment, auditorium, Atlantic City

•National Metal Exposition, Amphitheatre, Chicago, Ill. (A. G. A. will exhibit)

NOVEMBER

6-10 *National Hotel Exposition, Grand Central Palace, New York, N. Y. (A. G. A. will exhibit)
8-10 *Wisconsin Utilities Association, gas and electric section convention, Schroeder Hotel, Milwaukee, Wis.

9-10 • Mid-Southeastern Gas Association, annual meeting, Sir Walter Hotel, Raleigh, N. C. 27-28 • Joint A.G.A.-SGA Employee Rela-

tions Conference, New Orleans, La.

1951

MARCH

- 12-14 'Mid-West Gas Association, annual convention, Hotel Fontenelle, Omaha,
- 19-21 •GAMA, annual meeting, The Homestead, Hot Springs, Va.
- 29-30 •New England Gas Association, annual meeting, Hotel Statler, Boston APRIL
- APKIL
 2-4 A. G. A. Sales Conference on Industrial and Commercial Gas, Industrial and Commercial Gas, Industrial and Commercial Gas Section, Shoreham Hotel, Washington, D. C.
 9-11 A. G. A. Mid-West Regional Gas Sales Conference, Residential Gas Section, Edgewater Beach Hotel, Chicago, Ill.
 10-12 Southwestern Gas Measurement Short Course, University of Oklahoma, Norman, Okla.
 16-18 A. G. A. Distribution, Motor Vehicles and Corrosion Conference, Hotel Peabody, Memphis, Tenn.

Hotel Peabody, Memphis, Tenn.

Personnel service

SERVICES OFFERED

Recent graduate (B.M.E.) C.C.N.Y.—Desires opportunity for trainee position in **Production** or **Development** work in gas industry. Prefer eastern area. (2)) 1648.

Engineer—Desires position with future. Willing to start in any capacity for which my training fits me. Eastern location preferred, but willing to travel. (B.M.E.), January 1950. 1649.

Engineer—Staff Gas Engineer large consulting engineering organization presently engaged in transmission and distribution gas system design and other phases of the gas industry. Changeover experience. Seeks operating opening utility company. Professional Engineer. (B.M.E.)—(40). 1650.

Junior Engineer-B.M.E., February 1950, top 10% of class, Tau Beta Pi. Ambitious, conscientious, young man (presently employed) desires future in production or distribution end of gas industry in Metropolitan area, N.Y.C. Attending Columbia University for M.S. in M.E. evenings. 1651

Draftsman—experienced in structural design, drainage, reinforced concrete, architectural, topographic maps, statistical charts and patent drawings. Some college training at George Washington University. Desires to locate near New York. 1652. Gas Utilization Engineer—Diversified experience in all phases of utilization including combustion, interchangeability, appliance development, testing, installation and servicing, furnace design and industrial consultation. Familiar with gas utility operations, sales planning and promotion. Willing to relocate and travel. 1653.

and travel. 1003.

Engineer—25 years' experience in appliance development field with utility and appliance naufacturers. Thorough knowledge of A.G.A. Laboratory procedures. Presently working with gas heaters, ranges, and combinations as well as oil heaters and ranges. Previous experience in gas and electric refrigeration and air conditioning fields. 1654.

POSITIONS OPEN

Assistant to Executive in charge of rates, large natural gas system operating in Appalachian area. Engineering graduate under 45. Experience in rate case work before State and Federal commissions, development of rate structures, contract negotiations. New York City headquarters. Unique opportunity for right man having the necessary professional and personal qualifications. Write complete details of background and experience. Also state references and salary required. 0581.

Gas Combustion Engineer—Large Eastern manfacturer desires services of an experienced gas engineer to develop gas burners and heating equipment. College graduate preferred. This position offers a permanent position with excellent opportunities. In reply, please give resumé of experience and salary desired.

Manager Gas Utility Property in East. Experienced. Give resumé. 0583

Service Superintendent—Must have actual experience servicing commercial gas appliances as well as ability to direct men. Probable location Chicago, after training. Apply by mail stating age, experience, starting pay, 654

Nationally known organization has vacancy for a personable appliance engineer with a comprehensive knowledge of A. G. A. Requirements governing cooking and heating appliances. A minimum of five years' of manufacture experience is necessary and some A. G. A. Laboratory experience is preferred. Ability to work with a sales department is essential. Location: eastern seaboard with some travel involved. Write stating personal history, previous experience, salary expected and enclose small photo. 0586.

Industrial relations.

(Continued from page 39)

Leaching-Control of Erosion-Control of Leaching.

The booklet also contains a list of state experiment stations in the areas of the new Texas Gas pipeline, a map of the company's pipelines, description of the soil conservation personnel, and a short description of Texas Gas Transmission Corporation.

Texas Gas has organized a soil conservation department headed by trained and experienced agriculturists who have the material, men and equipment to do a specialized job of aiding the farmer and conserving the soil above the pipelines.

- Supervision Magazine, May 1950, contains an article summarizing the information found in a new study called "Survey of the Training Director." The study was made by Richard Guyon, Standard Oil Co. of Ohio, and issued by Western Reserve University. Replies from the questionnaires sent out in order to obtain the desired data were received from 113 training men from companies which had a total of 1,272,104 employees. Among the subjects surveyed were specific duties, training, salaries and position on their company's organization chart.
- Personnel Journal, May 1950, contains a summary by Arthur M. Whitehill, Jr., of practical value, type of training and the cost of the advanced management program of Harvard Graduate School of Business Administration. The six subjects covered in the program are administrative practices, business and the American economy, cost and financial administration, production management, marketing management and problems in labor relations. The two thirteen-week courses each year are designed

to benefit top executives through use of the case study method.

● Personnel Controls—A timesaver with a capital "T" is the "Over-all Personnel Control" which gives the busy executive a quick monthly round-up of what happened to turnover, grievance, safety, absences, employee benefits, and a dozen other factors which can be of particular interest to a company.

This control is a short cut that presents on a brief, pithy page the sum and substance of an otherwise mountain of personnel statistics. It can be prepared easily from running records by a clerk or other office employee.

A sample form and a description of its use appears in National Foremen's Institute's "Employee Relations Bulletin," June 7 issue.

The article points out that this tool is not for the top executive's use only, but can be used effectively as a way for keeping foremen in the know on what's happening. Some companies now put it on the agenda for discussion at the monthly foremen's meeting. The control, distributed monthly to supervisors, helps them answer employee questions, too.

- Employees and supervisors at Johnson & Johnson (New Brunswick, N. J.) who have completed any of the company's multitraining courses, receive a "diploma" in the form of a 3" x 4" card attesting to their new education. Each card is signed by the personnel director, and is so neatly designed that employees are proud to carry it in their wallets.
- Employment prospects for the 1950 crop of college graduates "are excellent in some occupations," but in others graduates will face stiff competition, Ewan Clague, commissioner of labor statistics, U.S. Depart-

ment of Labor, told a recent convention of the Council of Guidance and Personnel Associations. Job opportunities will be good, he said, in fields important in health service—medicine, dentistry, nursing, etc. but there will be stiff competition for jobs in the fields of law, engineering, chemistry, journalism, personnel work, and accounting.

● Free stock for employees—One share of common stock free for each unit of savings is the offer made by Standard Oil Company (Indiana) to its employees. Under the proposed plan, eligible employees may save from 2-4 percent of their pay. These amounts are invested in United States savings bonds (Series E). If the employee continues these savings for a year, the company gives him one share of stock for each unit of savings, equivalent to one and one-half times the book value of the stock.

From 1921 to 1938, the company had a stock-purchase plan, but during the depression the price of the stock fell below the actual cost of the stock to the employee, even though the company paid two thirds of the cost. By giving the stock to the employees, the company hopes to avoid the unfortunate experience of the depression years.

This is one of several new features described in "Trends in Employee Benefit Plans" in the May Management Record, National Industrial Conference Board.

● Stream conditions—Bulletins entitled "Stream Conditions for the Fisherman" are sent out weekly during the fishing season to newspapers and sportsmen's organizations by the publicity department, Pacific Gas & Electric Company. They are also posted on company bulletin boards. Sample copies of this public relations feature may be obtained from L. J. Nevraumont, manager, personnel department, Pacific Gas and Electric Co., San Francisco, California.

A.G.A. Advisory Council

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